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HARPER'S WEEKLY
A JOURNAL OF CIVILIZATION

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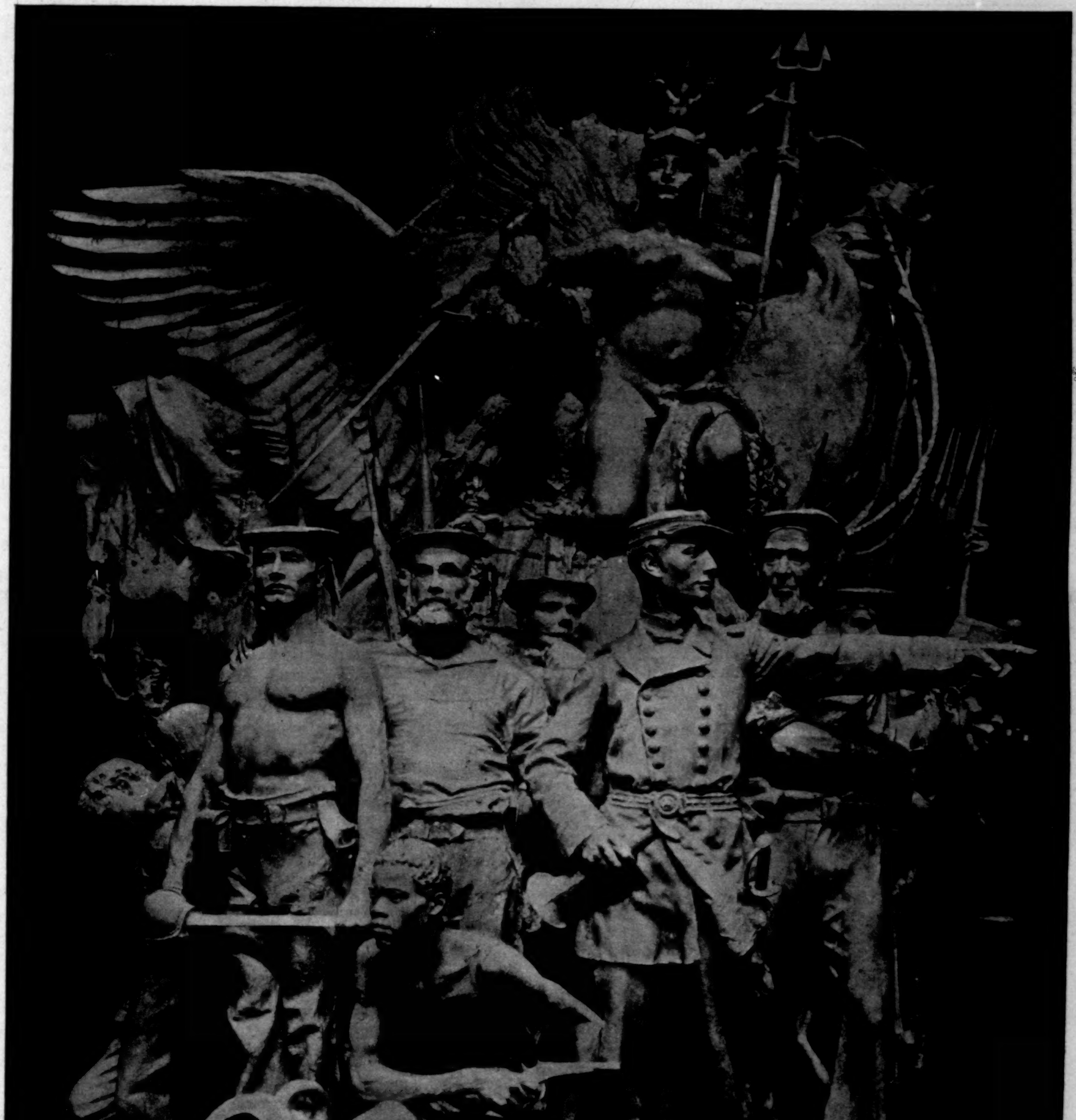

"THE NAVY."

SYMBOLIC GROUP IN HIGH RELIEF, DESIGNED BY FREDERICK MACMONNIES FOR THE MEMORIAL ARCH AT THE NORTHERN ENTRANCE TO PROSPECT PARK, BROOKLYN.

HARPER'S WEEKLY

(TWENTY-FOUR PAGES)

NEW YORK CITY, JULY 15, 1899

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Responsibility of Congress

THE responsibility for the military situation in the Philippines rests upon Congress, and is a natural incident or result of the character of the legislative branch of our government. It is not astonishing; it was always inevitable. Every intelligent observer of Congress and its methods must have anticipated the condition of affairs which now exists in Luzon. No one but an irredeemable jingo or imperialist could possibly have overlooked the fact that military success there must be difficult so long as Congress insists upon at once controlling and neglecting the army. So far as HARPER'S WEEKLY is concerned, we warned the country months ago that Congress either did not realize the enormity of the military task in the Philippines, or it was indifferent to the consequences of its own misconduct, and we sincerely wish that some impression might then have been made on the minds of the men into whose hands the Constitution places the control of our military establishment.

It is clear now to reasonable men that the WEEKLY was right when, more than three months ago, it said that at least 75,000 troops would be needed for garrisoning the Philippines. General LAWTON, who is on the spot, thinks that 100,000 men will be necessary, and he is probably correct. What General OTIS says of his requirements cannot be taken against the opinion of General LAWTON, because the latter is supported by the facts. Our troops have not been able to conquer the insurgents, and they have made no substantial progress. They have been fighting the Filipinos since February. No one can say that the war has not been carried on with energy. On the contrary, it has been distinguished by the enterprise of the officers in command. It has also been marked by exhibitions of skill and heroism which have made the country still more proud of the American officer and soldier. Battles have been of almost daily occurrence, and those who have directed and fought them have apparently done all that human intelligence and courage are capable of, but the army seems as far off as ever from subjugating the insurgents. We have killed the natives by thousands, and while we are doubtless losing comparatively few by their bullets, our loss from the climate and its diseases must be enormous. What is finally borne in upon the consciousness of the country, however, is that the fighting is still going on, and that our victories mean nothing. Our troops meet the enemy to-day and beat him. He flies in the darkness of the night, burning his villages behind him, and he reappears in the morning. Again he is defeated and his men are slaughtered, and again he comes up in the morning with fresh thousands. So the drama goes on from day to day, and in the mean time more and more of our little army are in the hospital. The truth is that General OTIS has not a sufficient force to cope with the task which the President and his treaty commissioners have imposed upon him, and the ten regiments now called for by the President are necessary.

When Congress was face to face with a war with Spain, and even after war had broken out, it had an opportunity to create an army capable of meeting the emergency and its consequences. It was asked to increase the regular army. It first neglected the request, and then refused it. This was largely because of the traditional incompetency of Congress to deal with military matters intelligently and efficiently, and largely because the average Congressman regards it as "good politics" to prefer the volunteer to the regular. At any rate, the volunteer was preferred, and the regular did his work for him. Moreover, all the additional men authorized for the army, both regulars and volunteers, were enlisted for the war, and no provision whatever was made for future emergencies. Therefore, when the war with the Filipinos broke out, a new effort was made to secure an adequate army. Perhaps it was then too late, for it might turn out to be impossible to enlist men for such a service. If, however, in anticipation of the war with Spain, Congress had authorized the increase of the regular army to 100,000 men, the government would not have been embarrassed by anything that has yet occurred in the military situation in the Philippines. The entire regular army might have been sent there and to the West Indies, if necessary, and Congress might have been induced to authorize the raising of a sufficient force for home purposes. But whether men can or cannot be induced to enlist under a proper law, Congress enacted a defective law, continuing and exaggerating the evils of the staff system, in consequence of which men suffered, and even died, in Cuba. Besides, the new law seemed to have been enacted for the purpose of providing commissions for civilians. In other words, Congress asked the youth of the country to enlist in an army, and to thereby put themselves at the mercy of a staff which had shown itself incompetent to feed, clothe, or transport soldiers, or to provide them with adequate medical attendance. It invited them into a second war, in which they would be compelled not only to fight under the command of uninstructed officers against savage enemies in a deadly climate, but against the staff and the politicians at home. The disastrous character of such service was abundantly shown in Cuba, and the history of the wrongs and privations from which our troops suffered there has not made the service popular.

MR. McKINLEY has led us into the Philippines, and our soldiers are there doing their best. But there are not enough of them to conquer a peace, and there will not be a thoroughly efficient force until Congress acts one way or the other. The country does not want the brave men already in the Philippines to be sacrificed for lack of support. Either they must come out or some others must go in. Congress can at least enact an intelligent army law which will provide for a sound military service. It is to be hoped that we can get men for this Philippine service, but it may be necessary to reform the staff system, and to transfer Congressional and civilian command to educated soldiers. We do not know that Congress would do its duty even if it were now in session, but there is no way to find out except by calling it together. Are we going to permit the state of things now existing in the Philippines to drag along, to the discredit of the country and to the serious danger of the troops who are now in the islands, or are we to take up our task and perform it with the intelligence and energy which the soldiers themselves are displaying in their field of action? That is the question before the country. The President alone can take the initiative, and he has done his duty. Congress alone, however, can give the complete answer. In the end, of course, everything depends upon the willingness of the youth of the country to enlist for the purpose of putting an end to AGUINALDO'S insurrection. But it rests with Congress to pass a law giving to the President the authority to raise a real army—a law that shall be itself a guarantee that when the army is raised its rank and file will be under the command of instructed soldiers; that the lives and physical welfare of the soldiers of the republic shall be at the mercy neither of incompetent staff-officers nor of speculating civilians; that, in a word, it is to be an army for fighting, and not an army for providing glittering places for the relatives and friends of any politician. It would be easy to pass a law establishing such a service as is needed for military purposes. Congress has already had two opportunities to do this, and has refused to avail itself of them. Its second refusal was more self-condemnatory than the first, because it acted with the horrible lesson of Cuba fresh in its mind. This failure of the legislative branch of the government to perform its duty under circumstances so provocative of intelligent and conscientious action may justify a doubt as to the utility of an extra session now. But it is never too late to mend. The exigencies of the moment demand action, which, so far as the government is concerned, can only be taken by Congress. The country is growing tired of the drifting policy, and is naturally anxious about a drift that is sure to wear out our soldiers in the Philippines, even without the assistance of the bullets of the enemy, unless they are re-enforced. Since the President cannot do all that is essential, and will not abandon the islands, it is his plain duty to call Congress together and to urge it to give him a real army, or at least to open the door to enlistments to men who are willing to fight under proper command and organization. If such an army cannot be raised, Mr. McKINLEY must acknowledge the defeat of his policy. We do not think, however, that he will be disappointed.

THE movement in England for a larger share of literary education in the schools and universities grows stronger, and it and the reasons for it will probably receive the attention of our own teachers. It is not a movement against scientific instruction, as some of its opponents like to assert, but it is decidedly hostile to certain so-called scientific instruction, which, under a fine name, conceals an effort to transform seats of learning into gymnasia for preliminary exercises in the bread-and-butter arts. It is one thing to educate minds inclined to science so that we have the awakened imaginations of the great discoverers in science, and it is quite another thing to teach men to become practical electrical engineers. The engineer is most useful to his day and generation, but he would be a much happier, and therefore a better, man himself if his mind were imbued with the humanities, and he would be likely to be more useful to the world. What the humanists are asking for is the recognition of the true value of literary education, and three admirable addresses have been recently delivered in England, which put the case for literature most strongly. Professor JEBB, who delivered the Romanes lecture at Oxford, took for his subject "Humanism in Education," and he indicated "humanism" as "an efficient and vital influence not only in forming men of letters and learning, but in training men who afterwards gained distinction in public life and in various active careers." Mr. JAMES BRYCE has also touched upon the interesting subject in a speech to the "Teachers' Guild of Great Britain and Ireland," and he has stated that, in his opinion, the change from the literary teaching to the teaching of physical science "has gone very much too far."

THE fact seems to be, however, that in England there has been a strong reaction in the universities of Oxford and Cambridge against the scientific fad which made such extraordinary progress twenty or twenty-five years ago, but which many educated men, and especially many teachers, now believe to be a mistake, since the scientific teaching, as it is pursued in the English-speaking countries, has degenerated into a mere cram of facts, or into an engrossment of the youthful mind in money-making occupations at a time when the moral and imaginative side ought to be stimulated and cultivated. The third speaker on the subject was Mr. BALFOUR, who addressed the great Wesleyan Leys school at Cambridge on the occasion of its twenty-fifth anniversary. It is in the secondary school where the anti-humanists have made their most obstinate lodgement, but at this particular institution the orator of the occasion had the sympathy of the head prefect of the school. Mr. BALFOUR expressed the view, which is obtaining more and more the assent of the best thought of England, that "all education which is not in part, and in considerable part, a literary education, is necessarily maimed and one-sided; an education, that is to say, which does not make the person educated at home in some great imaginative literature, and which does not put him in sympathy with the great literary artists and the great thinkers of the past, and perhaps of a very different epoch, is an education which must leave undeveloped some of the finer sympathies, some of the more valuable qualities, which education ought to develop." Such an education is in violent contrast to that which, as Mr. BRYCE declares, produces "a hard, dry, unfertile type of mind"—a description whose accuracy will forcibly strike those who are familiar with the annual "output" of the scientific schools connected with our own universities. We have not the space to pursue this subject at this time, and we merely content ourselves with adding that if our colleges—the small college like Williams, which has seemed to be on the verge of taking the step, can begin the task to most advantage—wish to become centres of intellectual light and leading in the twentieth century, they must breed some humanists along with their engineers; and if they do this, succeeding generations of Americans will possess a literature infinitely superior to anything we have had, creditable as that has been, and statesmen such as the country and the age and its civilization deserve.

THIS BUSY WORLD. *By E. S. Martin*

THE Lorelei fountain, once the subject of discussions so violent and protracted, has finally settled down at 161st Street and Mott Avenue, where on July 8 it was unveiled and presented to the city of New York by its German-American citizens.

It will take some time for all New York to become acquainted with a work of art so far north as 161st Street. The first people, not of its immediate vicinity, to know the Lorelei fountain will be the great army of bicyclists, who surge northwards daily, seeking new interests and new delights. But all who care for art will want to see and know that fountain. It will be remembered that it has never been held in disrespect as a work of art, the chief objection to it here being that it was unsuitable, both in subject and in relative importance, to occupy the Plaza site. That site is, in many respects, the best that is left in New York. If any monument is ever placed there, it should be one that in subject and treatment is unquestionably worth its situation.

THERE seems to have been due basis for the recent rumor that the brass band of the Chicago University had been forbidden to play "A Hot Time in the Old Town To-night," and inasmuch as the chief end of a college band must still be to play that tune, there has been some lawful curiosity as to the motive for a prohibition that seems to be so arbitrary. The tune really seems to have been ruled out of the band's list by some one who had authority, but its exclusion was apparently a part of an effort to promote fair playing in athletic contests. It is averred that the Chicago University band has been wont to go to the ball matches in which its nine took part, and that it has not scrupled to meddle with the game by playing tunes in double-quick time when its own men were running bases, and dirges and psalm tunes for the base-runners of the opposing nine. It was apparently in discouragement of this and kindred practices that its list of available tunes has been reduced by the elimination of "A Hot Time." However any one may deplore all unwarrantable abbreviation of the liberties and privileges of undergraduate brass bands, there is bound to be sympathy with every species of effort to make baseball a decent sport, and to abate various nuisances which are hurting its reputation. Unless most accounts err, the spirit of rowdyism is strong in baseball nowadays, and far too many tricks and unworthy machinations are used familiarly in the game. Certainly baseball ought not to be played by a brass band, or by any one outside of the two nines engaged and the umpires. Moreover, the nines ought to play it with bats and a ball, and not so much by word of mouth. The standard of baseball manners seems low. Why it should be low is not apparent, though it is said to be due to the employment of professional coaches. Certainly every effort made to raise it deserves support and applause.

A COLLEGE custom which has been reviled with considerable bitterness this season is that which governs the announcement of elections to the Senior societies at Yale. There are about three hundred men in a college class at Yale nowadays, and of these forty-five get into the Senior societies. The custom is to get the whole Junior class out of an evening, accompanied by the rest of the university, and then to sort out the forty-five elect, somewhat as steers are cut out of a herd of cattle by cowboys. The show is immensely interesting to the crowd, and is a great strain on the nerves of the eligible Juniors, of whom at least a hundred have more or less hope of being chosen. There are some crushing disappointments, and some unexpected promotions, and the crowd gets the benefit of both. This year the Hartford *Courant* commented on this show as "indelicate and devoid of consideration, a distinct discredit to Yale, and a growing threat against the society system." "Somebody," says the *Courant*, "ought to have the sense and the power to stop it"; and the Springfield *Republican*, also a near neighbor of Yale, declares that the *Courant* is "emphatically right."

Both at Yale and at Harvard the system of clubs and societies has been outgrown. At Yale the two Senior societies must, when they were started, have taken in about half of each class. Now there are three of them, and they take in less than one-sixth of each class. It is very much the same with the more exclusive clubs and societies at Harvard. There too the classes have tripled within twenty-five years, while the clubs have not increased in anything like the same proportion. The more exclusive Harvard clubs, however, are less conspicuous, less mysterious, less active, and less recognized as part of the college system than at Yale.

ONE of the announcements that come with the end of the college year is that the perennial Fayerweather will case is to be reopened (under a decision by Judge Lacombe), and tried all over again in the United States courts. Two Fayerweather nieces in Iowa are the latest fighting claimants. Truly it seems as if the gentlemen of the law had had their share of the Fayerweather accumulations, and as if it was time to leave the cause of education in peace with its bone.

WHERE is now taught that which it is most profitable for the American citizen to know? Where is the stamping-ground of the best Americanism, the spirit that we trust to, with whatever misgivings, to make our country great and keep it clean. Dr. Clark of the Christian Endeavor Society has been travelling in the West—in North Dakota, Utah, Washington, Idaho, and contiguous parts. One thing which he thinks he has noticed is that there is a more vigorous Puritanism in those parts of the West which were settled from New England than exists nowadays in New England itself. Is there coming a time when the Boston parent who wants his son to imbibe the true New England spirit will send him to college in California? Will he send him to Cornell, or Wisconsin, or Chicago on a quest for democratic inspirations? That may come some time, but it has not come yet. The sons and daughters of the West still come East in large numbers to put various finishing-touches to their education, but as yet there is no corresponding stream the other way. Every year, though, we of the East come to know the great Western universities better. When Wisconsin rows on the Hudson and beats the two great universities of New York State, it brings home to us very clearly that they make something in Wisconsin nowadays besides beer.

IT does not take profound study of the race problem in the South to discover that the penal system in many of the Southern States seems only too well adapted to make unruly negroes bad and bad negroes worse. Chain-gangs are pretty generally criticised as being schools of vice, yet they are maintained in the South because they provide a cheap way of disposing of criminals, and because the proportion of criminals to tax-payers being in some States very large, a cheap provision for them is urgently needed. Any reader of race-problem literature is likely to ask himself whether Northern philanthropists who want to help the South in working out its problem might not do well to consider whether the need of reformatories is not even more urgent than the need of more schools. Report says that young persons—lads and girls—and especially young negroes, are sent to the chain-gangs for slight offences, to their great detriment, because there is nowhere else to send them. At present the only reformatory for young negroes in the South is at Birmingham, Alabama. It is good news that another is to be started in Hanover County, Virginia, and that Mr. C. P. Huntington has bought 1300 acres of land which he expects to devote to it. Among the promoters of the scheme are Dr. H. B. Frissell, of the Hampton Institute, and President J. H. Smith, of the Reformatory Association.

GENERAL FUNSTON, whose graphic use of language leads to his sentiments being quoted more, probably, than he would approve, is reported as saying that though not on general principles an expansionist, he believes that, being in the Philippines, we should stay there to the bitter end, "and rawhide these bullet-headed Asians until they yell for mercy." That sounds somewhat savage, although the general sentiment it expresses is very widely held; but much of the sting is taken out of it by the general's supplementary declaration, that "after the war I want the job of Professor of American History in Luzon University, when they build it, and I'll warrant that the new generation of natives will know better than to get in the way of the band-wagon of Anglo-Saxon progress and decency."

It is certainly an interesting combination of purposes to rawhide the Tagals until they are ready to quit fighting and then to give them prompt and thorough instruction in American history. No doubt General Funston feels, as we all do more or less, that it is ignorance of the American character and American intentions that makes the Filipinos so intractable at present. The suggestion that Funston, for his part, would like to stick to Manila when the schoolmaster's turn comes shows an interest in the islands which it is an encouragement to note. It ought not to be possible—probably it is not possible—to fight a brave people (even though they are bullet-headed Asians), who are ready to die for what they call liberty, without becoming interested in their future welfare. Exchange of hard blows is apt to breed respect on both sides.

A GOOD deal of attention has been attracted to the action of Mrs. McCormick of Chicago and her daughter, Mrs. Emmons Blaine, in filing schedules at the assessors' office, in Chicago, showing an unusual amount of personal property subject to taxation. Mrs. McCormick invites the assessors to levy taxes on about a million dollars' worth of her securities; Mrs. Blaine, on a million and a half. Both ladies are widows, and both are Presbyterians. In both cases the schedules filed represent a conscientious desire to fulfil the requirements of the law.

The prevailing sentiment among persons who are subject to large accumulations of personal property is that the taxation of anything else than real estate is an impertinence, the evasion of which by any means short of perjury is a righteous action. They say, with much truth, that all personal property is the evidence of things somewhere visible, and taxed where seen; that to tax property in sight, and also the certificates of ownership of such property, is very wrong, and ought to be discouraged; and, finally, that the taxation of concealable property puts a premium on deceit and doubles the burdens of honest persons, while those who are more wily and less scrupulous go free. Accordingly, a great many honorable people pay no more personal property taxes than they can help. They will not lie about their holdings, but neither will they volunteer information.

Mrs. McCormick and her daughter are much simpler in reasoning and in conduct. They merely say: "The law calls for such and such payments. We have such and such property. Please send us our tax bill." This primitive way of doing business has won them the distinction of being the largest payers of personal taxes in Chicago—an honor (for it is an honor in their case) to which their ample possessions are not supposed to entitle them.

It is an expensive example these ladies have set, but both of them are very ready to spend money in the service of the public, and it is doubtful whether they could make a more usefully instructive disbursement than this which they have chosen.

IN the face of some opposition, Dr. Benjamin Andrews has been re-elected superintendent of schools in Chicago. The Chicago Federation of Labor denounced him as making it hard for the poor man's daughter to become a school-teacher, and he was accused of preferring men to women as principals of the schools. There were also politicians who did not find him as useful as, in their opinion, he should have been, and he was charged with being a friend of President Harper of the Chicago University. Nevertheless, he appears to have made a good superintendent, and it is gratifying to know that he has been continued in his office.

THE University of Chicago has declared for free speech among the members of its faculty. Recent speeches of Dr. von Holst and Professor Laughlin against the policy of expansion brought the subject up for discussion at the congregation of the university on June 30. It was determined by vote that the principle of complete freedom of speech on all subjects was the fundamental principle on which the university was founded, and that while the professors are at liberty to speak their minds on all public questions, their utterances are to be regarded as representing their own opinions only.

IT is computed that more than $25,000,000 has been given or bequeathed during the last year to educational institutions and libraries in the United States. An observing contemporary notes that one benefit from the transfer of this great sum to uses of public education is that by helping to make independent of State and local aid the institutions which it goes to, it helps to make their teaching less subject to the influence of transient public sentiment. Where the support of a university depends on the will of a legislature, the instruction that it gives in such subjects as political economy, social economy, and history is liable to be affected by political considerations; but an institution that stands on its own pecuniary legs has nothing to consider in its choice of doctrine further than to teach what makes most for sound learning and coincides most accurately with apparent truth.

SOME interesting testimony about coeducation was given the other day by Dr. Buchanan, who came from Kansas City to New York three years ago to organize the first boys' high-school in Manhattan Borough. He was called here because of his excellent success in managing the Boys' and Girls' High-School in Kansas City. The question being agitated whether to have mixed or separate high-schools in Brooklyn, Dr. Buchanan said that he came to New York a believer in coeducation, but that his views had been shaken by his experience here, since he found that the work of his boys' school here was distinctly superior to the excellent work of the mixed school from which he came.

Sixty per cent. of the boys in his New York school are Hebrews. He said of them, "I have never seen so much ambition as there is among these lads from the Hebrew quarters." He says his boys, a majority of them Jewish, are equal in conduct and superior in industry and achievement to the American girls and boys of his high-school in the West. "If all boys' high-schools are like this one," he said, "then I am a convert to the policy of separate education for the sexes in such institutions."

Many persons find the atmosphere of New York stimulating. Perhaps it is more stimulating than that of Kansas City, and the school-children show the difference. As to the aptitude of the Jewish children in New York for learning, there has been testimony before this of Dr. Buchanan. But, admitting that there are other striking differences between his Western and Eastern schools besides that one was mixed and the other not, his preference for the separate school for boys is still interesting.

IT has been pleasant to see how generally credit has been given to R. C. Lehmann, Harvard's erstwhile English coach, for an important share in the recent Harvard victories. However Mr. Lehmann's theories of the mechanics of rowing may have seemed to be unsuited to American crews, it is everywhere conceded that his ideas of amateur sport, and of the spirit that should be back of it, had no flaw in them, either in theory or in practice, and that to the spirit which he helped to arouse in Cambridge the Harvard victories of this year are largely due. His visits to Cambridge and his labors there must rank among the most useful and successful missionary enterprises of the decade. It is another case of a general who loses all his battles and is still a victor in the end.

Liquid Air on Tap

LIQUID air seems assuredly to have been brought from the laboratory to the use of the world by the invention of Mr. Oscar P. Ostergren, a Swedish engineer, who for several years has been a resident of New York, and his associate, Mr. Moritz Burger. A plant that has just been built in this city for the purpose of testing the value of their process has the capacity of producing over 1500 gallons of liquid air a day, at the low cost of but five or six cents a gallon. Thus the two barriers that have prevented the practical use of this wonderful new force, its high cost and the inability to produce it in great quantity, appear to have been removed.

The great efficiency of Ostergren's invention, with the consequent low cost of production, compared with the processes by which Professor Dewars of the Royal Institution, Professor Carl Linde, of Munich, and Mr. Charles E. Tripler, of New York, have liquefied air, is due to a fundamental difference in the liquefier. In all the other processes, save the Ostergren, air is liquefied at the end of a pipe, either straight or coiled, and great difficulty arises in insulating, by means of non-conducting materials, against the heat of the atmosphere. In the Ostergren process air is liquefied at the centre of a cylinder, instead of at the end of a pipe, and between this centre, which is the critical point where liquefying temperature is reached, and the outside, where danger is lurking in atmospheric heat, there are seventy-two coils of copper tubes, through which intensely cold air is circulating under pressure. These tubes are soldered together, one above the other, into a vertical wall. The spiral space or channel thus formed around the wall of coiled tubes, it is very important to state, is a partial vacuum. In a word, the Ostergren liquefier is self-insulating, as each stage in the process partially insulates the succeeding stage, and the aggregate of these partial insulations, by the time the critical centre is reached, produces practically perfect insulation. This fundamental difference between self-insulation and what might be termed artificial insulation has been made the foundation for granting what is believed to be a basic patent—one of those exceedingly rare things in the history of invention.

BURNING CARBON IN LIQUID AIR.

ICE IN A MINUTE.

But given liquid air in large quantity at low cost, which is certainly the result of the Ostergren process, and what are the practical uses to which it can be put? To begin with, this process at once makes possible innumerable experiments as to the utilities and economies that the new force can serve—experiments that have been awaiting the conditions as to quantity and cost that have now been secured. The possibilities that have been so freely predicted, ranging all the way from cheap and clean refrigeration to the fantastic theory of "surplusage," can now be tested. That many of these possibilities will be found to be realities there can be little doubt, just as the dreams of yesterday in regard to the uses of electricity are the facts of to-day. Indeed, many of these possibilities of practical use are already virtually realizable, for Ostergren has brought them within reach. Appreciating that the value to the world of a new force would be measured by the actual value of the work that force would do, he prepared himself both to produce the force and to demonstrate its utility. To this end he invented a vessel in which the liquid air could be kept with very slight loss through evaporation and transported any distance. This vessel is of copper surrounded by a jacket of some non-conducting substance and encased in an ordinary wicker hamper. A slight modification has been made in this vessel, in making one to be used in refrigerators, by having the encasing vessel of copper as well as the inner one which contains the liquid air, and with a non-conducting jacket between them, as in the case of the larger vessel for transportation use. By a gauge the amount of air to produce a given temperature is regulated, and when it escapes from the inner vessel it expands in the space between the inner and outer vessel and falls to the bottom, where there are outlets, through which it passes into the refrigerator to do its work of lowering the temperature. Mr. Ostergren has also invented a fan for cooling rooms. Its wings are attached to a small turbine which is connected with a little reservoir of liquid air. The air escaping over the turbine keeps the fan in motion, and the fan picks up this power which turns it and sends it as a fresh breeze to do a work of cooling. In all this wide field where there is comfort or utility in low temperatures liquid air, with its 312° Fahrenheit below zero, comes into its own. One gallon of it, weighing 7¾ pounds, has the cooling power of 85 pounds of ice. Besides this advantage in bulk, it has the advantages over ice of being absolutely clean and absolutely dry.

The practical value of liquid air as a high explosive, in connection with carbons, has been clearly established in Germany. When made by the Linde process, which has but one-fourth the productive efficiency of the Ostergren process, it has been found to be cheaper and better than dynamite or nitro-glycerine. At the present time two Linde plants are being built at the great Simplon tunnel in Switzerland, one at the north end and one at the south, to supply liquid air to do the work of blasting. It is estimated that the United States, in building the Nicaragua Canal, would save over $20,000,000 in doing the blasting which the Walker commission reported would be necessary, if liquid air, at the low cost at which it can be made by the Ostergren process, should be used as an explosive. Nordenfeldt, the great Swedish gunmaker, who has lately been on a trip to America, told Ostergren, after having gone over the designs of his process, that he was convinced that liquid air would have great use in the heavy ordnance of the future if it could be made in the quantity and at the cost which Ostergren's designs and Burger's calculations called for. Since Nordenfeldt made this statement these calculations have been shown to be correct. But this warlike use of the new force had not escaped the inventor. He detected it in the study of the subject, and designed a gun and shell, in which alcohol or charcoal and liquid oxygen are to be used for the charges. Alcohol will be used in the gun, and thus the explosion at firing will be smokeless; but not so with the shell as it flies toward the enemy. In it charcoal is used as the carbon, so when it explodes smoke will be spread as well as destruction. The battle-ships a few years hence, therefore, may have a liquid-air plant in place of the menacing powder-magazine, and make the explosive part of their ammunition from the atmosphere. This may seem incredible, but surely it does not seem more incredible than did the statement about transmitting messages across the ocean that once came from the big house in Gramercy Square, where Field was working out the plan for the Atlantic cable.

LIQUID AIR BOILING IN ICE-CUP FROZEN BY LIQUID AIR.

FROZEN ALCOHOL.

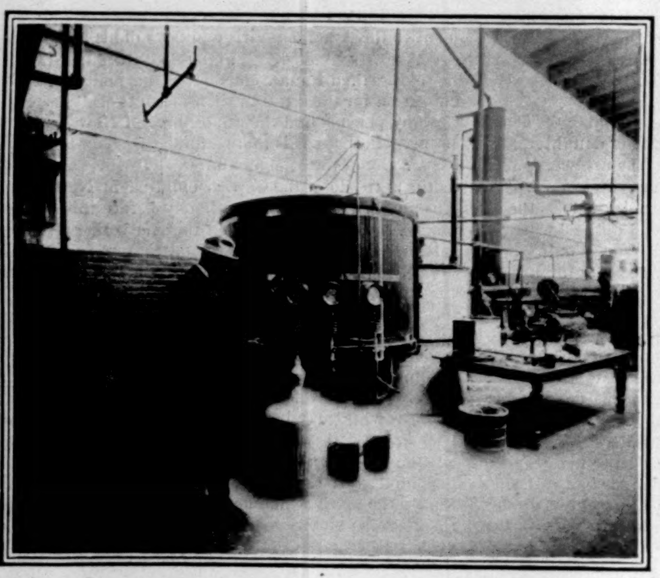
THE LIQUID-AIR TURBINE.

As a motor power, quite as much as a refrigerant and as an explosive, liquid air seems destined to have a large use. One gallon of it, taking into account both its expansive power and its latent cold, equals two-horse power for one hour. The application of this power is a problem in mechanics which is even now being solved.

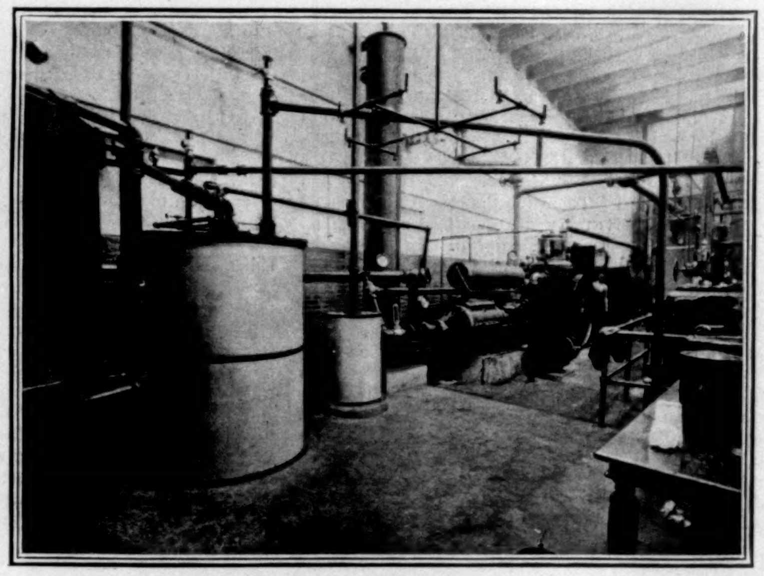
Late German scientific reviews devote much attention to the part liquid air is to play in illumination. They tell of complete success in producing calcium carbide with liquid air without electricity. They also speak of the great use liquid air will surely serve, paradoxical as it may seem, in producing high temperatures, as, with it, it is easy to get a gas containing 50 per cent. oxygen, while the atmospheric air contains only 21 per cent. In the Bessemer-steel process, and in all places where great heat is required, the large proportion of oxygen in liquid air will render efficient service.

This new force, therefore, has in its train all the elemental forces—heat, cold, light, and power. With cheap and abundant production, and with safe control, all of which are now secured, liquid air, it would surely seem, cannot fail to do a Titan's part in the work of the world.

HERBERT SHERMAN HOUSTON.



THE INVENTOR AT THE LIQUEFIER.



GENERAL VIEW OF PLANT.

Submarine Navigation

THE LAUNCH OF THE "NEW ARGONAUT"

WITHOUT ceremony and with the entire absence of ostentation which has characterized his attempts to solve the problems of submarine navigation, Simon Lake had placed in the water on July 6 his submarine vessel *New Argonaut*, which was described in HARPER'S WEEKLY in April, and which is believed to be the most complete and practical submarine boat yet launched. Naval men and wreckers predict for this new product of American skill and enterprise a successful career.

The new explorer of the ocean depths is an enlarged and improved copy of the old *Argonaut*, in which Lake made the first successful explorations upon the ocean-bottom. It is remarkable on account of being not a mere cigar-shaped cylinder crammed with machinery, in which men can exist only with extreme discomfort and danger, but a commodious vessel in which a crew will live, eat, and sleep under water, and which looks, when on the surface, precisely like a small steam-yacht without a funnel, having a deck sixty-six feet long, and an oval steel pilot-house, which may be used as shelter in stormy weather. All other inventions of this sort have been hermetically sealed "coffins," which must be closed up tightly whether the boat is on the surface or under water. In coming from or going to the point where he desires to submerge, Captain Lake can always run on the surface and enjoy as much comfort as on a steam-yacht. Indeed, few large steam-yachts are so well equipped with the latest appliances for comfort and safety as this submarine; and none can go below the surface as the *New Argonaut* can.

It is expected that many discoveries of great scientific and historical interest will be made by the new boat, which is not intended for use in war. The wrecks along the Atlantic coast, beginning with the *New Era*, sunk off Asbury Park, are to be thoroughly explored for valuables; after which the boat, if all goes well, will go to the Bahamas and West Indies, to locate new sponge-beds in deep water, and, if possible, some of the many treasure-galleons of Spain which have been the theme of history and romance for centuries. The location of these is now known in many cases to within a hundred yards, and they can be uncovered with the sand-pump, which pumps sand as readily as if it were water.

Exploration beneath its weedy surface of the Sargasso Sea, of arctic and antarctic regions beneath the ice, of many gardens of the sea which man has never seen, is rendered possible now by the launching of the *New Argonaut*. She will carry a crew of the most experienced wreckers and divers in America, and with this combination of service and skill on board, will certainly be directed with ability. Her launching may perhaps be considered as a historical event.

The *New Argonaut* is sixty-six feet long and ten feet wide, and *weighs* about a hundred tons. She is divided into two sections—a "yacht hull" without a bottom, and below it a cylindrical, cigar-shaped "submarine hull." Everything within the boat is placed in the latter—which is of immense strength, built as strongly as a battle-ship, and of the same materials—and in the conning-tower, which rests on the submarine hull, and runs up through the yacht hull above the deck.

The boat will habitually travel on the surface until it reaches the place where it desires to submerge. It will then drop downhaul weights from its reel, and by winding up the cables attached to the weights on windlasses within, and letting water into its ballast-tanks, sink directly down. On the bottom it will become a submarine automobile, rolling over the sand on three wheels propelled by electric engines and gasoline engines, and aided by its screw. Its powerful electric lights will illumine the water around it, and from its diving-room divers may emerge into the sea. It will have an ample air-supply from its air-pipes leading to the buoys on the surface, and from compressed-air reservoirs.

C. S. CLARK.

THE SUBMARINE AUTOMOBILE "NEW ARGONAUT,"
Immediately after being lowered into the Water at the Erie Basin, Brooklyn.

CUP PRESENTED TO M. CAMBON BY PRESIDENT McKINLEY.

Robert Bonner

WITH profound regret the WEEKLY records the death of Mr. Robert Bonner, a man eminent and estimable in so many ways that his varied activities cannot be adequately characterized in a brief note, or in the present issue.

Mr. Bonner was born near Londonderry, Ireland, on April 28, 1824. When fifteen years old he came to this country, and entered the printing-office of *The Hartford Courant* as an apprentice. In 1844 he secured employment in New York city, where, in addition to his work as foreman of the *Evening Mirror*, he acted as correspondent of a number of papers. The small capital secured in this way was used in the purchase of *The Merchants' Ledger*, which Mr. Bonner transformed into a family journal—the famous *New York Ledger*. His success as a publisher liberated impulses which expressed themselves about equally in favor of man and horse. In 1887 he retired from active business.

Heroes

WE read on many a glowing page
Of men whose lofty heritage
Was valor in the shock and stress
Of red war's mad ungodliness:

These have marched bravely side by side,
And wrought their cruel fratricide;
With pitiless will their hands have hurled
Ruin and death upon the world.

We call these heroes, and we cry
Their glory to the silent sky,
And in glad days of peace we save
Our garlands for the soldier's grave.

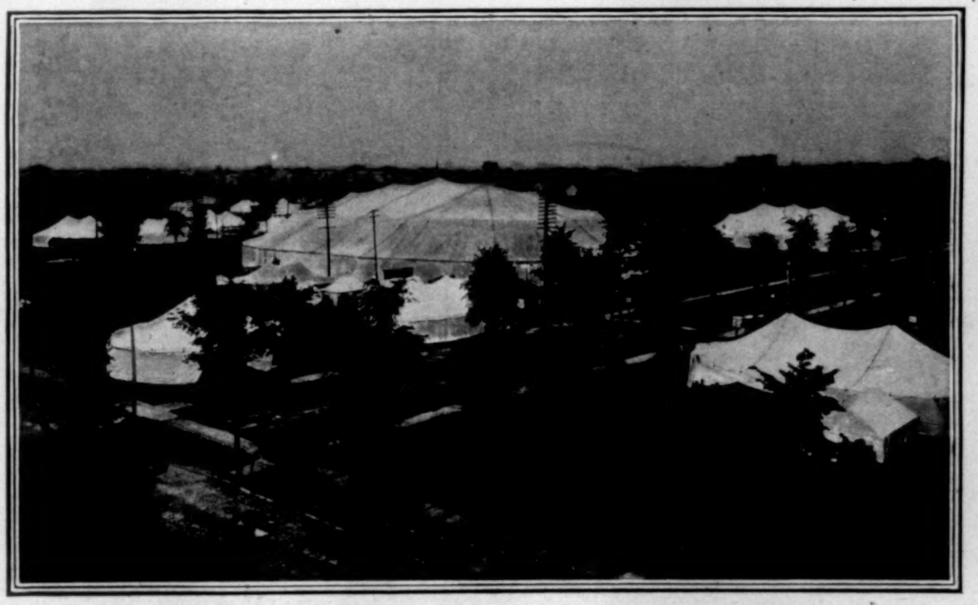
Are these the only heroes, then,
These who were fearless, faithful when
War, with imperious command,
Ravaged some fruitful mother-land?

Nay, though we honor them, we know
Life may burn high with modest glow,
And in all strenuous paths of fate
Strong hearts of heroes throb elate:

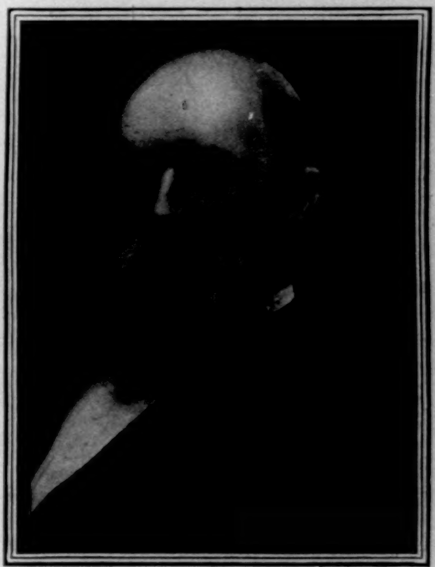
Strong hearts, true hearts, that long to give
Their strength to others, hearts that live
In some divine, unselfish plan
Which builds the brotherhood of man:

The fire of mercy dews their eyes,
A fire that never fails nor dies,
And theirs is one immortal creed—
Love blossoms in a gentle deed.

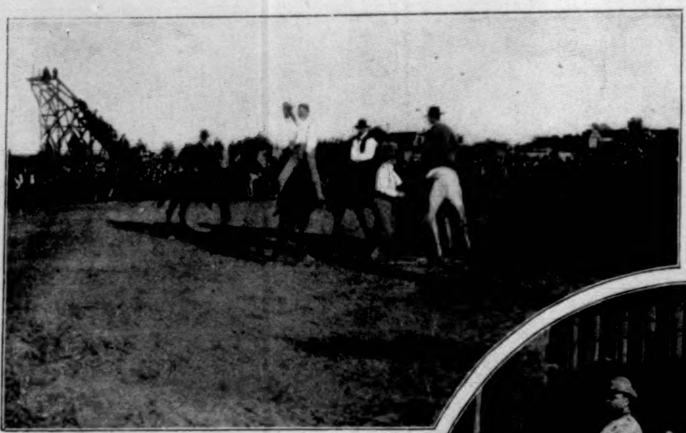
GEORGE EDGAR MONTGOMERY.



THE CHRISTIAN ENDEAVOR CONVENTION AT DETROIT.
General View of Grounds, the immense Tent Endeavor in Foreground.—[See Page 705.]



ROBERT BONNER.
Born April 28, 1824. Died July 6, 1899.



WILLIAM WOODS,
Rough Rider and Prize Bronco-Buster

WOODS AND LACKEY ROPING AND TYING STEER IN 1 MIN. 2 1-2 SECS.

COLONEL ROOSEVELT AT THE HEAD OF THE PROCESSION.

Rough Riders' Reunion

AT Las Vegas, New Mexico, on June 24, the anniversary of the fight at Las Guasimas, Governor Theodore Roosevelt, formerly Colonel of the First Volunteer United States Cavalry, met those of his troopers who had gathered there for the first annual reunion of the regiment.

All along the line of his journey, especially in Kansas, Governor Roosevelt was accorded a splendid reception. Just before reaching Las Vegas the Governor donned his faded Rough Rider uniform, including the big broad-brimmed hat which lent such a picturesque air to his appearance during the war. With it he donned the character of the Colonel of the Rough Riders. He forgot his cares as Governor of New York, and from the time he reached Las Vegas to the time he left he apparently had no thought but for his old regiment.

Five thousand people waited for him at the Las Vegas depot. He stepped from the car platform into the arms of his men. One hundred and fifty of them were drawn up in line to receive him, but all discipline was thrown aside as soon as he commenced to grasp them by the hand and call each one by name. The officers of the regiment at the reunion were Lieutenant-Colonel Brodie, Major Llewellyn, Captains McClintock, Luna, Curry, and Mueller, and Lieutenants Ballard, Dame, Griffin, Kelly, Devereaux, and Leahey.

Every troop in the organization was represented by one or more troopers. Governor Otero did the honors for New Mexico, ex-Governor Adams represented Governor Thomas of Colorado, and Governor Murphy and ex-Governor McCord of Arizona were present. As over four hundred of the Rough Rider regiment were recruited from New Mexico, it was proper to hold the reunion in that Territory, and most of those present came from the New-Mexican troops. One man came overland three hundred miles in a wagon, with his family, because, as he said, he did not have enough money to come any other way, and nothing could persuade him to lose the chance of seeing his colonel once more.

The afternoon of June 24 was devoted to a regimental meeting of the Rough Rider Association. Colonel Roosevelt was elected honorary president; Lieutenant-Colonel Brodie, president; Major W. H. H. Llewellyn, first vice-president; Lieutenant David Goodrich, second vice-president; and Lieutenant W. E. Dame, secretary and treasurer. Sunday morning, the next day, Parson Uzzell of Denver delivered a memorial sermon. In the afternoon Colonel Roosevelt reviewed the regiment as it marched under the folds of its stained and torn battle-flag. Then came the presentation of a gold medal to Colonel Roosevelt from the people of New Mexico, and later in the day a sabre was given to Lieutenant-Colonel Brodie by the same generous hands. JAMES DAVENPORT WHELPLEY.

The Trolley in Korea

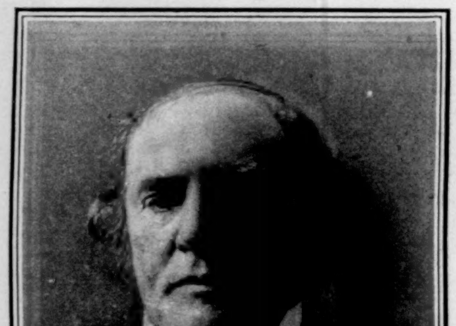
"WOMEN, as well as men, can ride on the cars"—such is the translation of paragraph number two in the rules, or notice to the public, prepared by the Korean president of the Seoul Electric Railway Company. The introduction of this trolley line is referred to by our correspondent as "the first step towards civilization in 'the Hermit Kingdom,'" and certainly it seemed that a wide departure from the customs of the country would be made when Korean women availed themselves of President Yi Cha-Yun's offer.

Formerly women were not allowed on the streets in the daytime, but a curfew-bell was rung at eight o'clock in the evening, after which hour the men were required to remain in-doors, while the women took their exercise.

The work of building an electric railway from the Governor's residence, outside the West Gate, through the heart of Seoul to the new tomb of Empress Min, beyond the East Gate, was begun last year, and completed in May of the present year. Japanese were employed as motormen, and native Koreans as conductors. For several days in May the cars ran over a portion of the route; the service was liberally patronized, and the enterprise appeared to be well established. On the 26th, however, when the president of the company and a few guests were *en route* to the imperial tomb, the first accident occurred—the child of a native was caught under the wheels and killed. But it so happened that the population of Seoul had for weeks been indulging in somewhat unscientific speculations as to the cause of a drought which afflicted the land, and now they either thought or pretended that the cause had been discovered. To quote from the *Korean Repository:* "The electric wires, some say, cut off the influence of Heaven; others affirm that as the power-house is built on a sacred spot, there can be no rain until the obstruction is removed." The people lost their self-control, stoned the company's employés, battered the car to pieces, and threatened to destroy the power-house. At this juncture the authorities gained control and order was restored, but the curious partnership of the trolley and women's rights in the Far East had received a temporary check.

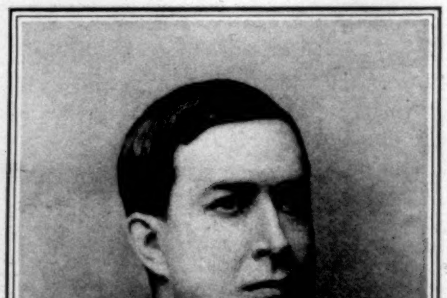
Amherst's New President

AMHERST has chosen as her new President a man whose culture expresses her best traditions; for Mr. Harris, a native New-Englander, is one of her own graduates—a teacher and preacher whose talents have either found or made their opportunity within the borders of Massachusetts. It should be added that in this field his influence has been fearlessly exerted in favor of the progressive movement. He was born at East Machias, Maine, in 1844; graduated from Amherst College in 1866; during the next three years studied at the Bangor Theological Seminary (1866 and 1867) and the Andover Theological Seminary (1867 and 1869); was ordained February 6, 1869; for three years continued in the pastorate of a Congregational church in Auburn, Maine, and then was pastor of the Central Congregational Church of Providence, Rhode Island (1872 to 1883). In 1883 he left Providence to accept the chair of Christian Theology at Andover; in 1896 he became President of the seminary. He was editor of the Andover *Review* from 1884 to 1893. His views have been enforced in writings of marked ability. As a preacher



BISHOP JOHN P. NEWMAN,
Of the Methodist Episcopal Church.—[See Page 705.]
Born September 1, 1826. Died July 5, 1899.

GRAND-DUKE MICHAEL,
Brother to the Czar, and heir-presumptive to the Throne.



WILLIAM GOEBEL,
Democratic Candidate for Governor of Kentucky.
[See Page 705.]

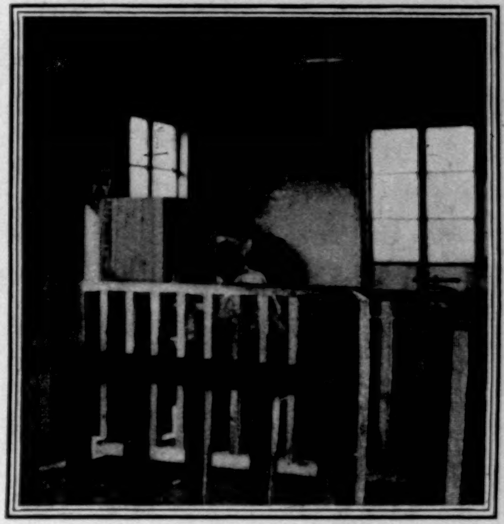
A TRIP TO THE IMPERIAL TOMB.

A CONDUCTOR.

REMAINS OF CAR BURNED BY MOB.

CAR OVERTURNED BY A MOB, MAY 26.

LOADED CAR, WITH CONDUCTOR AND MOTORMAN.



THE COMPANY'S OFFICE.

KOREA—THE OPENING OF THE HERMIT KINGDOM—TROLLEY-LINE TROUBLES AT SEOUL.

he has gained great popularity, and he has taken a hearty interest in questions of the hour. His selection as the chief executive of Amherst was announced after a meeting of the trustees of the college held on June 27.

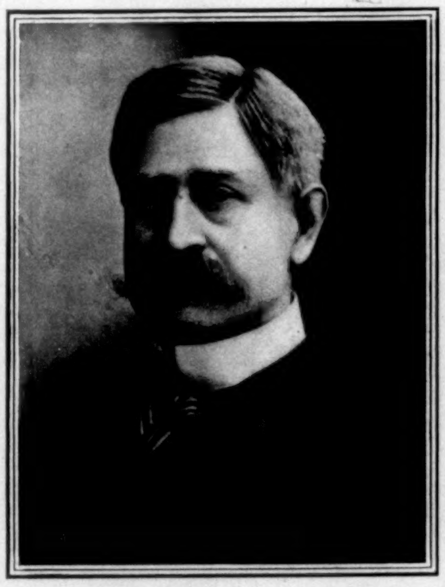
Two College Presidents

TWO of the most important Presidential vacancies in Western universities have been filled during the last month. Dr. George E. MacLean, for several years chancellor of the University of Nebraska, has been called to the Presidency of the University of Iowa, and President William O. Thompson, of Miami University, has accepted a like position in the Ohio State University at Columbus.

The regents of the University of Iowa have made long and careful search for a President, and those who know Chancellor MacLean, his attainments, and his work believe that the issue of their inquiry has been a most fortunate one for the Iowa institution. Dr. MacLean is a man of most attractive personality, a profound scholar, and at the same time an approved executive officer. His collegiate training was had in Williams College, where he won highest honors, taking his degree in 1871. He studied theology, was pastor of a church in Lebanon, New York, for a time, then went abroad for special study in German and English universities. He returned with his Ph.D. degree in 1884, and became Professor of English Literature in the University of Minnesota. In 1894 he again went abroad for study, spending the year in the British Museum and Oxford University. He was elected, upon his return, to the Presidency of the University of Nebraska, succeeding his friend Chancellor Canfield, who had accepted the Presidency of the University of Ohio.

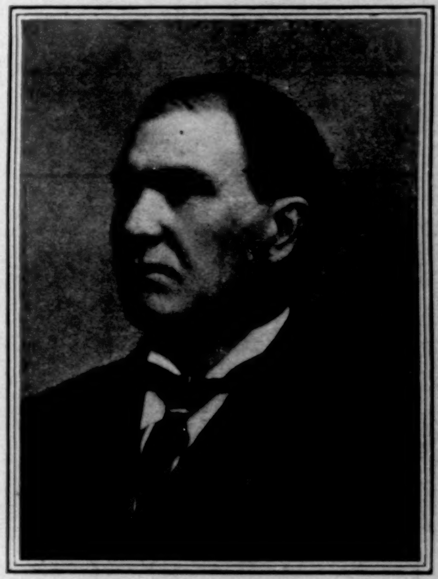
Although possessed of private fortune and of scholarly tastes, he is democratic in spirit and a man of the people. His administration of the Nebraska institution gives promise of a successful career at the Iowa University.

While President Thompson is not much known beyond the borders of his native State, he is most favorably known there, and greatly beloved, especially by the friends of Miami University, in whose interests he has labored the last eight years. He was born in Guernsey County, Ohio, and inherited all the advantages of poverty. He made his way through Muskingum College with great difficulty, and was obliged to interrupt his studies more than once to secure the means to complete the course. He took his bachelor's degree in 1878, ten years after his entrance. He then entered upon a theological course, and was graduated in 1882, and engaged in home mission-work in Iowa and Colorado. In the latter State he became President of a small college, and was called in 1891 to take the Presidency of Miami University, which has just celebrated its seventy-fifth anniversary. Reports indicate that he has done a good work for Miami during these years.

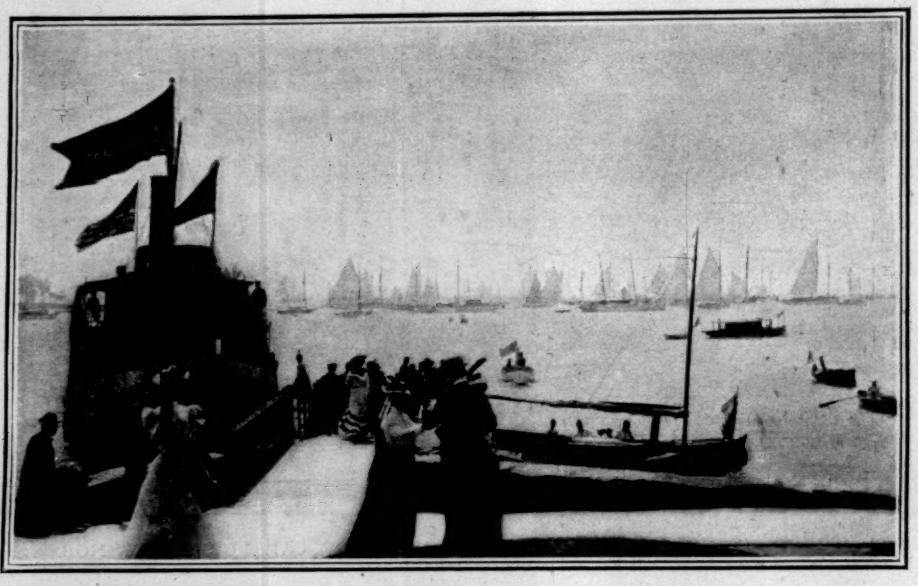


GEORGE EDWIN MacLEAN, LL.D., Ph.D.,
New President of the University of Iowa.

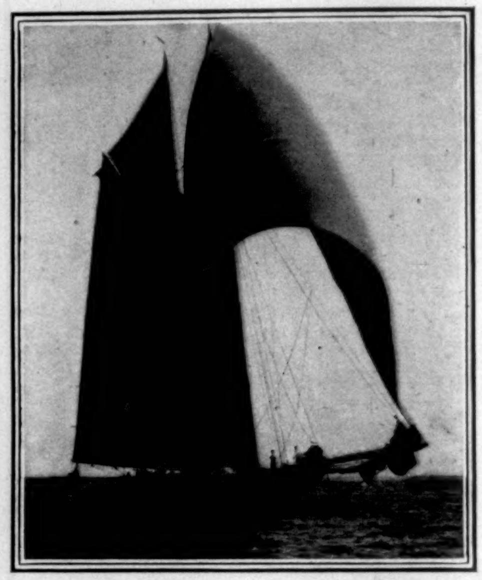
PROFESSOR GEORGE HARRIS, D.D.,
New President of Amherst College.



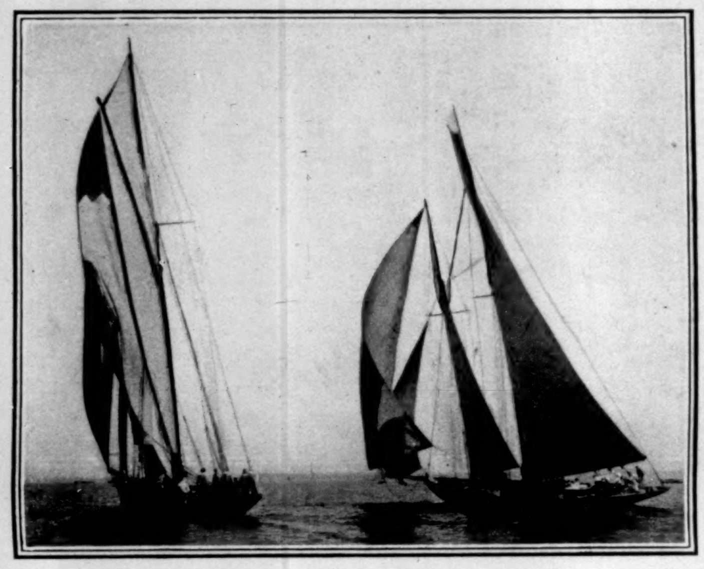
WILLIAM OXLEY THOMPSON, D.D., LL.D.,
New President of Ohio State University.



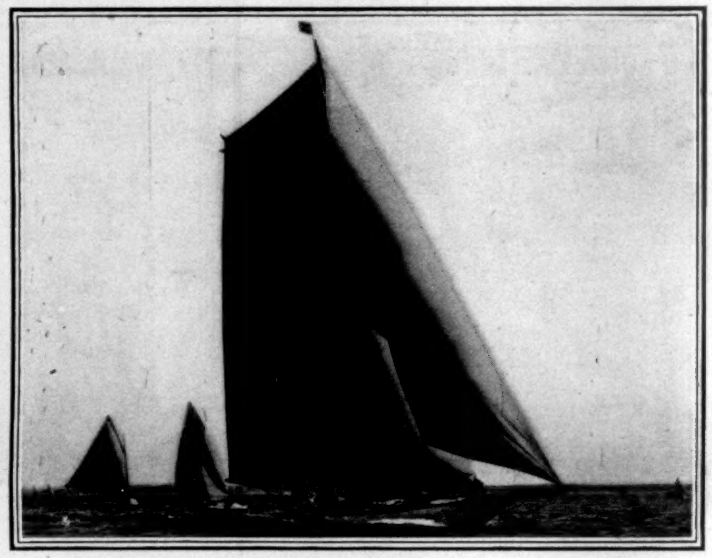
STARTERS AT ANCHOR OFF THE CLUB-HOUSE.



"COLONIA," WINNER OF THE COLT CUP, NEARING THE SOUTHWEST STAKE-BOAT.

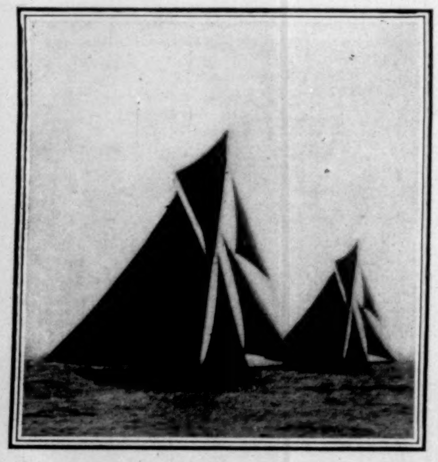


"QUISETTA" AND "KATRINA" AT THE START.

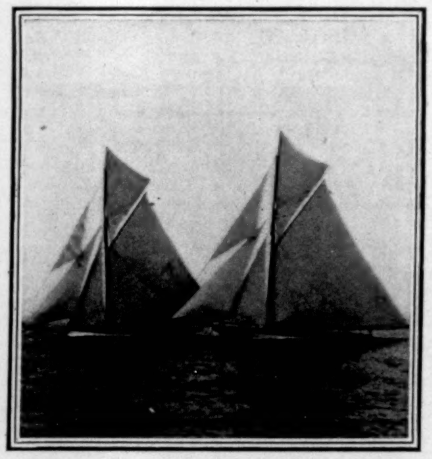


"SYCE," WINNER OF CLASS K.

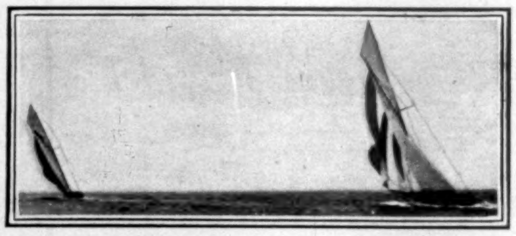
THE FOURTH OF JULY REGATTA OF THE LARCHMONT YACHT CLUB.



JUST AFTER START.



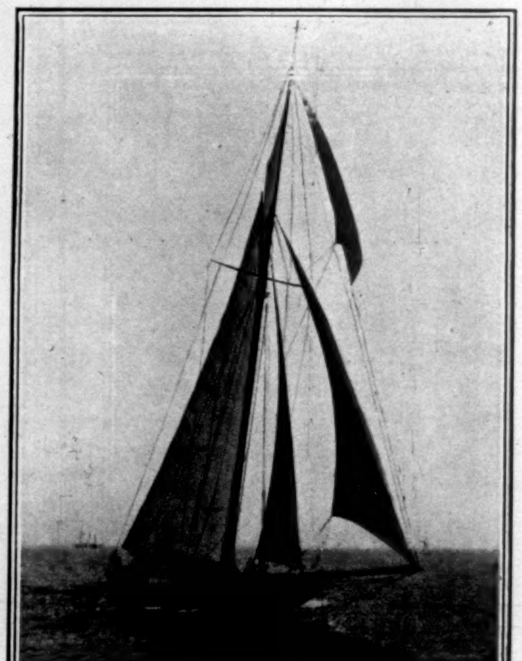
TURN, FIRST LEG. "COLUMBIA" JUST PASSING.



"COLUMBIA" LEADING "DEFENDER"—JUST AFTER TURNING THE STAKE-BOAT.

"COLUMBIA" MAKING FOR THE STARTING-LINE.

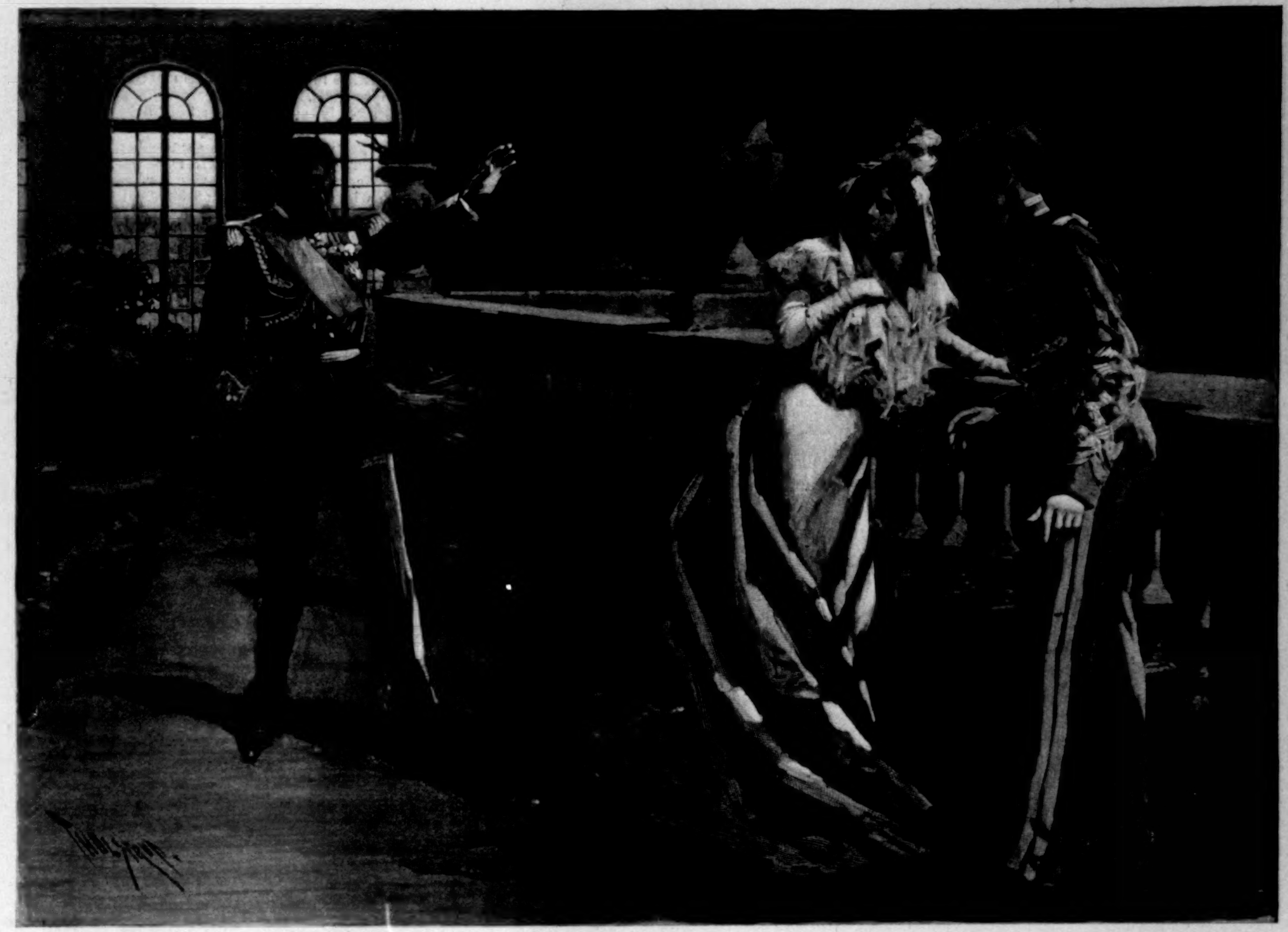
"COLUMBIA" BEATING TO WINDWARD.



"COLUMBIA" MANŒUVRING FOR THE START.

TO DEFEND "AMERICA'S" CUP—FIRST RACE BETWEEN "COLUMBIA" AND "DEFENDER," JULY 6.

[SEE PAGE 704.]



THE CONSPIRATORS. *By Robert W. Chambers*

AUTHOR OF "LORRAINE," ETC., ETC.

This story was begun May 13, 1899.

SYNOPSIS OF PRECEDING CHAPTERS

Holland and Germany desire to secure control of the Grand-Duchy of Luxembourg. The United States and England favor the former. An American minister is accredited to the Grand-Duchy, and Gilbert Hardy, a young army officer, is ordered there as military attaché. Hardy, mistaken for von Elbe (a stranger of much the same age and build), is arrested and imprisoned. A beautiful woman visits the supposed von Elbe, professes her love for him, and implores him to leave Luxembourg for her sake. She gives him a ring as a keepsake. He establishes his identity, and goes to the American Legation, where he finds his chum, Victor Osborne, as First Secretary. He again meets von Elbe, whom he now knows to be Prince Edric of Prussia, and tells him of his adventures in prison. Edric in turn tells Hardy of his passion for a peasant girl of Luxembourg, who resembles the Queen of Holland, and of the Emperor's desire that he should wed the latter. Gendarmes come to arrest Edric, who is taken into the care of the Grand-Duchess. Hardy recognizes in Amyce, Countess of Wilverwiltz, one of the attendants of the Grand-Duchess, his midnight visitor. He receives orders to resign for a while from the United States service, and reorganize the Luxembourg army. He meets the Countess, and promises to use his influence to reconcile the Grand-Duke and Grand-Duchess, who, though loving each other, are drifting apart. The Countess, believing that Edric had come to Luxembourg out of love for the Grand-Duchess, had resolved to visit him in prison, and, impersonating the latter, force him in honor to leave. Learning that the supposed Edric was Hardy, she becomes furiously angry. Hardy meets Athel, Grand-Duke of Luxembourg, at Wilverwiltz. He afterwards sees the Countess talking with Wiepert and Vossburg, two German spies. A pro-German conspiracy in the Luxembourg army is nipped in the bud. Hardy informs the Countess that the ring she gave him had belonged to Edric, who had lost it, and that he had returned it to the latter. He obtains another in its place. She tells him that Edric is conspiring against the Grand-Duke, which he denies.

CHAPTER XIX.

HIS HIGHNESS SPEAKS.

A chapter devoted to the generalities that treat of particulars, and especially of wisdom gained by experience.

THE advent of Osborne had brought the first glimmer of gayety to Wilverwiltz. Everybody felt it; and everybody, in the feverish desire to distract their thoughts from their own unhappiness, began to suggest all kinds of amusements.

There was a golf tournament, easily won by the Countess Amyce, who held up the great silver loving-cup, the first prize, and ironically invited me to drain it.

"Why not?" said I, taking it from her. "I have drained bitterer cups at your command."

Luckily for me it was nearly empty, else I should not have made my promise good, for the cup held quarts.

Edric, who had taken possession of the three wolf heads killed that day in the preserve, spent most of his time mounting them for the Duchess. She had shot two wolves under his guidance, and she presented him with the cup she had won—an act as gracious as it was undiplomatic, considering the marked coolness between her husband and the Prince.

"What the devil has Athel against me?" he asked me more than once; and I could not convince him that the Duke suspected him.

"Rubbish!" he exclaimed. "Any idiot can see there is nothing but good comradeship between the Duchess and me."

Any idiot could not see; but I was unable to make him understand that.

"I'm not going to offend and slight a dear little woman who is very kind to me," he said; "and Athel can go to the devil."

"He's going fast enough," said I. "He's drinking too much wine; and, worst of all, he drinks alone in his den. Drown sorrow in good company and there's hope for you, but a solitary drinker is in sorry company."

"He's a brute to neglect his wife," was all Edric would answer; so I prudently desisted for the moment, wondering where the thing was going to end.

After the golf tournament the Duke took possession of Osborne and me, and we stood in coverts and banged at pheasants until I wished every bird was broiled and eaten and the coverts burned over. The first flight of woodcock gave us better sport, but I thought it somewhat selfish of the Duke to withdraw from the château and dampen any attempt at gayety there. Perhaps he divined my thoughts, for he said, one day,

"It's either this sort of thing or drinking myself stupid in my gun-room—and you know it."

"Your unhappiness is of your own making," I said, bluntly.

He wheeled about as though he meant to strike me. It was a narrow escape for one of us, for my patience with him had nearly ended, and he meant murder for a moment.

He sat down on a log, very pale, and rested his handsome face on his closed hand. I pitied him, but I had said all I could say, considering his abnormal sensitiveness.

We walked back, chatting as though nothing had happened; but he was drunk that night—drunk, all alone in his gun-room, where I found him lying white and stupid in his chair; and I sat there with him until morning.

A day or two later, the season at Scheveningen being ended, the Duchess threw open the house at Wilverwiltz, and there began a series of gayeties that made the little court quite brilliant. His Excellency came down from Luxembourg, trailing in his wake the callow *personnel* of the Legation; Colonel Toxé, Major Latrille, and the Duke's treasurer, Baron d'Arlon, also arrived, re-enforced by a dozen harmless little counts and countesses and barons and baronesses, who had played all summer in the salt water of Scheveningen like well-conducted shrimps, and were now most amiable and pink-and-white, and very Luxembourgeois, with the Luxem sometimes left out.

"I guess," observed his Excellency, drawing me into a corner during an intricate and much-beribboned figure in a cotillon, led by Osborne and the Duchess—"I guess, Hardy, that the sooner these children are taken care of by the Sudden One the better it will be for 'em. But that ain't what our government thinks, and we've got to look out for the Dook, or the Sudden One will catch him asleep."

"I wish to Heaven," said I, "that I could begin reorganizing the army. Now is the time, if it's going to be done."

"Can't help it," replied his Excellency. "Our government says wait until Germany gets into better temper, so I guess we'll have to wait."

That night I had a long conversation with his Highness and his Excellency concerning the reported disaffection of the army. The Duke treated the whole matter contemptuously, declaring that Giroux and his gendarmerie were enough to frighten the army into a collective fit.

"Still," I said, "if there should be a riot—even disturbance enough to give Germany a pretext for intervention—the chestnuts would be in the fire, and I don't think the United States would pull them out for your Highness."

"I'm damn sure of that," said his Excellency, bluntly.

The Duke laughed very heartily, assuring us that the half-dozen disaffected soldiers in the army had been too thoroughly frightened to continue plotting—even if they had ever plotted.

"Don't be too sure," said his Excellency, mildly; "still waters run deep, and stagnant pools collect poison; and, God knows, your army, Dook, is the most stagnant collection in Europe."

"It is—but it won't be as soon as we begin reorganization," said the Duke, hopefully. "Universal service and new blood will do wonders for Luxembourg."

That was always the way such councils of state ended. The Duke absolutely refused to see any danger in the constant rumors of discontent fomented by German agents. He laughed at the idea of personal danger; he said he would do anything to insure the security of the country and its independence; but, he argued, nothing further could be done until the United States persuaded Germany that there was no reason why the Luxembourg army should not be reorganized and increased.

As for Toxé and Latrille, his Highness, if he suspected them, did not show it, nor did he acknowledge it to me. I have often thought that the idea of his officers betraying him mortified him so much that if he did not entirely discredit the possibility, at least he was too sensitive and proud to admit it to foreigners.

He was a very brave, very lovable, very illogical, and very unhappy young man.

Meanwhile Osborne was having a glorious time; so was Bettina, except when the Duchess told her gently and sweetly that she was dancing too much with Osborne. That made her unhappy for nearly an hour, during which she walked all around the park wall with Flic, who nearly caught the grasshoppers which Bettina's little feet startled into a click-clicking flight across the clover.

Nevertheless, that evening she danced with Osborne until her cheeks flamed and her eyes sparkled, and she felt that it would be no very difficult performance to drift

into paradise on the arm of this cool, laughing-eyed young American.

As it was my fate to conscientiously attempt to manage everybody's affairs except my own, I spoke to Osborne about Bettina, and felt like a prig for doing it.

"My son," said Victor, kindly, "go to the deuce!"

"You are a selfish brute," I replied. "Anybody can see you have turned her head."

"Well," he said, "if it were true, I am not married, am I?"

"No, and you won't be to Bettina, if the Duchess has a head on her shoulders," I replied, "or if I have."

"Is there any reason for saying such a thing to me?" he inquired, suddenly savage.

"You put the words and the reason into my mouth," I rejoined, "when you said, 'Politicians never love or hate.'"

"Rubbish!" he retorted, reddening; "if you believe everything I tell you—"

"I don't, Victor. Only don't be selfish in your amusement."

He went away, looking very sober, but I saw him later in the evening leading Bettina blissfully through the mazes of one of those devilishly seductive Spanish waltzes.

As for me, I had not danced at all since the series of cotillons had begun at Wilverwiltz. Not that I could not; every boy at West Point is obliged to learn. But after the first formal figure with the Duchess his Highness usually withdrew to the terrace, and I of course attended him, being in full uniform and acting as aide-de-camp.

Once he said: "You know, I don't mind if you care to dance. I would enjoy my cigar the more for watching you."

So one evening, after examining the dancers who passed the great windows in whirls of silk and lace and fluttering ribbons, I told his Highness I wouldn't mind dancing, and he laughed his youthful, kindly laugh, and told me to pitch in.

We stood a moment together, watching his Excellency proudly footing it with the Duchess. We observed Toxé and Latrille prancing about with two shell-pink baronesses; we applauded old de Ruyter, who turned stiffly round and round, his rigid arm encircling Bettina's little waist. Edric was dancing with Amyce. I watched them until he led her to a seat, then, pulling on my gloves, I sauntered into the ball-room and looked about for somebody to take pity on me.

Bettina did at once, bless her little heart! and we whirled away, to the intense disgust of Osborne, who had been mustering up his courage to ask Bettina for a third time, in spite of the discouraging attitude of the Duchess.

"Dear me!" exclaimed Bettina, breathless, "I didn't believe you knew how to dance—you never came on the floor, you know."

"I'll come oftener now," said I, leading her to the Duchess, which manœuvre almost cost me Osborne's friendship.

"Imbecile!" he muttered in my ear. "It's the very thing I've tried to avoid; the Duchess knows we've danced twice. Go back and ask her Highness for this waltz."

I was contemplating a move in the direction of Amyce de Wiltz; however, I did as he wished, and the Duchess prettily consented, in that delightfully informal manner peculiar to the court of Luxembourg.

After that, at her Highness's request, I danced with several delicately tinted baronesses, all resembling each other, all monotonously pretty and frivolous.

As I was strolling towards the conservatory to rejoin his Highness, rather dissatisfied with my terpsichorean essays, I encountered the Countess of Wilverwiltz on Osborne's arm, and I bowed pleasantly and passed them, with a little tightening of the heart.

Now whatever it was that made me stop and look back I do not know. It seemed as though a still voice had spoken my name, close to my ear, yet I scarcely expected it to be true. Nevertheless, on the impulse I turned, and saw the Countess looking back at me. We both stopped; I retraced my steps and came to where she stood, still holding Osborne's arm.

"I don't understand how you could have heard me speak," she said, a trifle disconcerted; "the music and chatter drown everything, and I scarcely whispered your name."

"A beautiful woman's whisper can be heard farther than a shout from the pulpit," I replied.

She turned to Osborne, and released his arm with a smile. Presently I found myself, with the Countess Amyce, floating in the dreamiest of waltzes, oblivious of everything except the soft light from the candles, the softer music, and the woman in my arms. Everything else had vanished—the people, the gilded walls, the polished floor itself. Even the light grew dimmer and softer, the music died away, pulsating as our two hearts throbbed, noiselessly; then seemed to cease.

We stood still; my arm fell from her waist; the harmony of voices around us grew and swelled out as consciousness returned. I saw Bettina passing with Osborne and her Highness; I saw Edric follow them into a flare of light, where glasses tinkled, and flagons flashed a million prismatic sparks through amber wines, and wines as crimson as the moist half-parted lips that smiled, answering my low-voiced thanks.

"No, let us go to the terrace," she said. "To-night I neither hate nor love, nor have I any human desire. It may never be so again; let us stand there a moment in the moonlight—and let us remember this waltz together."

His Highness, sitting with cigar unlighted, smiled at us as we passed. I saw his pale handsome face bent on his breast, where the broad orange sash swept over his uniform, studded with jewelled orders.

We bowed low; he rose and watched us to the terrace, then turned away alone.

In the moonlight a white peacock, moving across the lawn, cast a pale shadow that dimmed the dewy diamonds strung on every grass-blade. Presently the ghostlike bird flapped to the parapet, folded its snowy wings, and settled down, its slender neck sunk in its breast.

"Something has disturbed it," I said, thinking of the stoats and foxes that roamed everywhere through the country; "there is some intruder near."

She did not answer; she leaned on the marble balustrade, her slender hands clasped beside her face, eyes dreaming.

After a long while I spoke again:

"Has hate faded forever—or will the morning bring it back, stronger than ever?"

"Morning?" she repeated. "What do I know what the morning may bring?"

"Perhaps nothing more than a memory of our dance," I said.

"Ah, that dance!"

"Our first."

"Yes, our first."

Then the spell that was upon her seemed to break; she looked up at me with dark mischievous eyes and strove to read me. It was easy enough, God wot.

"I suppose," she said, "you are tiring of my hatred?"

"I can stand this kind," I smiled.

"Oh, I know I am much too kind to you," she went on, resentfully; "it's only because I myself tire of such passionate hate—not because I care what you may feel."

"You certainly encourage me by having any feeling at all towards me," I said.

"I don't mean to encourage you; if I thought indifference would hurt you I'd be indifferent."

"It would," said I; "but you can't be."

"I can," she flashed out, rising from her position on the parapet; "and I beg you will return me my ring."

"I won't," I replied, serenely.

"Give it to me at once," she said, in a low voice.

I wore it on a chain in my left breast pocket, and I drew it out and began to undo the swivel clasp that held it.

Then a painful thing occurred: his Highness, vague-eyed, pale, stepped out of the glass door behind us, and at the first glance I saw he had been drinking heavily.

Confounded, ashamed, I moved forward impulsively, but he motioned me back with a gesture.

"You fools!" he said—"you fools, to hurt each other with unkind words!"

In the deathly silence I heard Amyce gasp.

"You fools," he said, bitterly, "to play with the love God sends you!"

He stood, slightly swaying, his pallid face and blood-shot eyes fixed on us. Then he went away, groping as though blinded, and I followed him to the turret door, but he waved me back.

"Take me in—if you please," said the Countess Amyce, in a still, small voice; "and—keep the ring—until I ask it."

I led her to the ball-room; the Duchess signalled her, and Bettina rose and came towards us.

"Leave me now," she said, her dark eyes shining with tears; "and if you can do anything for his Highness—"

"What he has done for us," I said, "I shall try to do for him—and his wife."

"Yes," she whispered, "what he has done for—us; try—for her Highness's sake. She loves him."

CHAPTER XX.

MASKS.

Showing how one cook might spoil the broth, especially considering the fact that he can neither cook for others nor prepare a palatable dish for his own consumption.

MEANTIME events were so shaping themselves in the United States that it really seemed as if the triple Samoan guardianship might be violently ruptured and a single protectorate over the islands proclaimed by Germany in the teeth of England and the United States.

"If that's the way the cat jumps," said his Excellency to me one morning, "Luxembourg will be safe for a while anyway; and it might not be a bad thing, if we know how to use it."

"You mean Cuba and Hawaii?" I asked.

"I do, young man, and so does the President. But he is not popular; he is too honest to be popular. But I guess we ain't going to fight about anything anyway, and the cat can jump whichever way she damn pleases."

"At present she has jumped on to the back fence," I said, smiling.

"Yes," said his Excellency, "the cat's on the fence and the nigger's in the wood-pile, and William the Sudden is sawing wood. I guess I'll hold a powwow with the Dook." And he walked away towards the golf links, where his Highness was driving off the tee.

It was quite certain that we were approaching one of those social and political anomalies known as "crises." Even I, lacking in diplomatic intuition as I was, could intelligently watch, and even forestall at times, the moves on the strategical chess-board, where the pieces were live kings and queens, and the pawns real armies.

Already the autumn manœuvres of the German army had begun, and, of course quite by accident, the theatre of operations was Rhenish Prussia. Nobody could protest because eighty thousand men were massing within a few hours' march of Luxembourg, because they were on their side of the frontier. That was a move of William the Sudden to develop his pawns.

The answer to that move was also a pawn-play, made by the little Queen of Holland, and so quickly that the Sudden One nearly lost his royal temper—which is unwise in chess. The answering move was this: the Dutch manœuvres, which usually take place in October, were advanced a whole month earlier; two stolid Dutch army corps, numbering perhaps fifty thousand men, were set in motion along that newly acquired strip of territory which enables Holland to pierce Belgium near Saint-Imbert and touch the independent Grand-Duchy of Luxembourg at the frontier hamlet of Sfax.

The next move in the game was more serious. William the Sudden himself arrived at Trèves, on the Moselle. In chess it would have been called a movement of royalty to support pawns. But the answer to that threw the Sudden One entirely out of all his calculations; for little Queen Wilhelmina, apparently possessed with a sudden thirst for military information, decided to watch the Dutch manœuvres in person, and was received at Hautes-Fanges with frantic cheers by the entire Dutch army.

"She'll come to Wilverwiltz before long, mark my words," said his Excellency; "and if she does it at the proper moment, she'll have all Europe with her."

These political preparations for a play that fate might make into farce or tragedy scarcely created an additional ripple on the surface of the gay whirl at Wilverwiltz. The very people who had most to lose or gain by a shake of war's iron dice paid the least heed to the ominous sounds behind the curtain. Yet I, for one, would have given much and dared much to find out what the scene-shifters had prepared for us behind that cloaked curtain diplomacy.

Even at Wilverwiltz events had occurred past my comprehension. The Countess of Wilverwiltz since that evening on the terrace never for a single second gave me a chance to see her alone. Not that she avoided me, but she always managed to have somebody else with her when I approached. Yet she received me now very graciously and sweetly, and with that faint trace of embarrassment which sets a man's heart quickening and nerves him to play that greatest of life's games—a game that none can play for him; a game where none can aid him, save his adversary; the only game where, when the woman loses, both win, and when the man loses, all is lost. I think it is called "hearts," or something similar.

But there were other matters concerning the Countess Amyce which occupied and troubled me: her increasing aversion to Edric, and her mysterious solitary horseback gallops into the Wiltz coppice, where, I began to fear, she was listening to more absurd lies from Wiepert and Vossburg touching on Edric's alleged intrigue against the Duke.

The worst of it was that she had evidently told the Duke of her suspicions; and his Highness, who already bitterly resented Edric's imprudent attentions to the Duchess, now took no care to conceal his dislike of the Prince.

If I could have laid my hand on Wiepert or Vossburg I should have taken it upon myself to expel them from the country—quietly, of course.

Once or twice I hunted for them, taking Giroux and a dozen of his gendarmes with me; but we found no traces of them, and Giroux narrowly escaped falling into a steel wolf trap, concealed in a patch of ferns.

"Sapristi!" he blurted out, perspiring from sheer fright; "you had better tell his Highness to take up his traps now that he's shot all the wolves in the preserve."

But wolf-traps were not the only thing to be dreaded in the forest. One morning, while on my way to breakfast with Edric, somebody fired a rifle, and the bullet jerked my hat from my head. It may have been an accident; they happen even in Luxembourg. But the curious part of it was that I caught a glimpse of Vossburg's bloated face through the hedge, and I tore the clothes nearly off my back to get through the hedge and compare notes with him on the coincidence. I suppose he became tired of waiting for me to get through. However, I told nobody.

That night, at the château, they gave Coppée's exquisite one-act comedy of "Le Passant." Amyce was *Sylvia*; Osborne, *Le Passant*. And, oh heavens! how I did hate him!

Then followed a little farce by Labiche, called "Frisette," in which Amyce made an adorable *Frisette*, the Duchess a very sweet and uninteresting *Madame Ménachet*, and Osborne a first-rate *Gaudrion*. The Voice of Monsieur Barbaroux was taken by Toxé—very unpleasantly.

It was then that I realized more fully than I had after the performance in my prison the delicious histrionic cleverness of the young Countess of Wilverwiltz. In that eighth scene she was simply exquisite:

Gaudrion (à part)—"Hum! Hum!"

Frisette (accroupie près de la cheminée, à part)—"Tousse, va! . . . si tu crois que je vais te répondre. . . ."

After "Frisette," his Highness seriously performed a judicious violin obligato, much applauded, and very, very bad. His Highness loved music as he loved his hounds, and he treated both with firmness and severity, for their good.

A delicately tinted pink-and-white baroness sang "Viens, zoué dans mon zardin!" and Osborne followed with a cleverly expurgated edition of "Barney Riley," on the banjo, which set everybody's marching-blood tingling. He capped the climax with dear old "Garryowen," beloved by the Seventh Cavalry; and the evening ended with a bit from Lovelace, said in English by Amyce:

> . . . As when on blazing wings a blest man soars,
> And, having past to God through fiery doors,
> Straight 's robed with flames, when the same element
> Which was his shame, proves now his ornament . . .

She turned the least bit as she stepped back through the crimson curtains and looked at me with fathomless velvet eyes. But when everybody had thronged to the ball-room, and the Duke's orchestra were fiddling madly in their rococo heaven, I found her, only to lose her the same instant, as she whirled away in a waltz with Toxé.

In vain I prowled, waiting my turn; in vain I sulked; in vain I glared that gloomy, unconscious glare which once amused me in other unfortunate young men.

Bettina and Osborne were doing two-steps all over the floor, to the intense annoyance of de Ruyster, who was slowly and methodically turning the Duchess, pivot wise, with a subdued yet earnest enthusiasm that made me fear he'd twist her Highness's pretty head off. Even his Excellency, tucking his partner's right arm into his own hip, as though adjusting a sword, footed it up and down in an antiquated waltz-step, to the polite amazement of his partner, a cream-and-strawberry baroness.

The Duke, watching them through the conservatory, signalled me to join him in a cigar, which I did, mentally cursing Toxé and anybody else who interfered with me.

"You're not dancing?" he asked, pleasantly.

"No, your Highness."

"Tired?"

"No—only of inaction."

"There's time for action when we change our laws and set all our good peasant folk marching behind the bass-drum."

"A tumble down stairs saves many a soul from the devil," I said; "there's a time for all things." . . .

"There is time. Armies are more easily mended than men's hearts."

I looked up at his sober young face, already lined under the eyes, and close to either corner of his mouth I saw new marks, those thin, almost imperceptible, threadlike lines of pain, not always physical.

"Men's hearts," I said, "are never out of their own keeping, public opinion to the contrary. With women it is different."

"Men seldom choose to claim possession of their own hearts, however," he replied, vaguely.

"That is also true, your Highness—even when their hearts are tossed back at their own feet."

After a silence he said, without the least emotion, and with a sincerity that touched me: "I wish I were dead, Hardy." He laid one hand lightly on my elbow; it was perfectly steady.

"You might better be—if this is all of life that life holds for you," I said; "but it isn't."

"What else is there?" he asked.

"The love of your wife," I replied, wondering whether he would knock me down. If he had, I should have given him a lively quarter of an hour; I felt in that humor.

His hand on my elbow tightened slowly, but steadily; his grip was viselike, with all the quality of metal in it.

"Damn you!" he said. "Do you know what you say?"

"Exactly," I replied; "let go of my arm!"

He dropped my arm; we looked into each other's eyes with perfect candor. After a moment he turned and walked out to the terrace, where acres of potted flowers perfumed the still clear air with a fresher, fainter fragrance for the tinge of frost in every breath.

I followed, lifting and hooking my sabre so it could not clash against the metal on the violet sabre-tache.

"I beg your pardon," I said; "I am in your Highness's uniform, and I forgot what was due to my superior officer."

"Hardy! Hardy!" he said, almost fiercely, turning a ghastly face to mine, "what do I care for that—or your rank or your uniform, or your tinsel sabre-tache? I need a friend—I need a man—a comrade who can tell me what you have told me—who can make me believe it—who can put some strength and courage and simple manliness into me. God knows it's time!"

I waited; for this was the moment for silence.

"I can't speak—I can't say what you know I would say," he went on, feverishly. "There's something that chokes me, that almost strangles me, when I try to ask for help—even from God. Shame, pride, and that curse of my life, my own cowardly, timid distrust in my own miserable self—all this and everything that I am—my every instinct, my inherited weakness, my indecision, and, above all, my shame—have made life such a hell for me that I would not live one second—now!—if I were not too proud to leave the world that way."

I said: "Your Highness's courage is unquestioned; the intelligence of your Highness leaves much to be desired. None so blind as he who will not open his eyes, except he who sees and says, 'O God, interpret for Thy servant!'"

He leaned heavily on both elbows, head buried in his hands. I saw his sabre, high on his thigh, begin to swing gently to and fro, silvered by the moonlight.

"If he can weep," I thought, "he can see and hear."

I said, again, leaning on the marble balustrade beside him: "Prince or no prince, you are a man. If what you seek is worth seeking, are you afraid to dare?"

"Yes, I am afraid. She knows—she knows what I am. She knows I am not a man—only a Prince, to be sold and bartered. She inherited me when she inherited the country—like a bit of gilt plate—like the quarterings on the crest there in the palace. Oh, the sorry tale!—a young life for the tarnished heraldry of a crest!—a woman's whole long life for a name and a palace, and the shadow of a man to haunt her till her eyes close at last and shut him out forever. Is it not horrible, Hardy—by God!—is it not horrible?"

He began to pace the terrace, his straight, shining sword by his side quivering in the moonbeams, the medals on his breast making mellow, golden music.

"Who are you, anyway, to question me?" he cried, wheeling about suddenly.

"Your officer and comrade—who would rather see you this way than lying drunk in your gun-room," I said, sharply.

He burst into a harsh, mocking laugh:

"Discipline in the army is wonderful when the commander weeps on his aide-de-camp's shoulder!" The next moment he stepped up swiftly and took my hand and held it tightly. "Forgive me, Hardy; I think I'm half crazy to-night. You've been very decent to me—good-night."

He lingered, looking curiously at me with what I thought was a happier expression on his worn young face than I had seen for many a day.

"There is only one man her Highness loves," I said, risking all or nothing.

He suddenly turned a deep crimson, standing there as awkward as a youth at his first tryst; and I almost laughed as I watched the color dye his face to the neck. Then he went away, noiselessly, and his step was lighter than a lover's; and his head was bent a little, so that I saw his eyes, as he passed, dreaming of what a man might dare for love. But what one dreams at night takes strange forms and fears by day, and I knew that the time was not yet come when his Highness would find courage to woo his wife for the love he bore her.

I walked leisurely back to the ball-room, where the Duchess had already given the signal for breaking up, and now stood with the Countess Amyce, patiently listening to Bettina's appeal for "one more waltz."

"Then I'll dance it with you myself," said the young Duchess, mischievously, and before Bettina could even pout, she found herself swung off into a delirious Spanish waltz, without the slightest chance of catching Osborne's indignant eye and soothing his disappointment with a *moue* of resignation.

This manœuvre, for the first time in days, left me alone a moment with the Countess Amyce; and before she had a chance to move closer to the group of alabaster baronesses behind her, I asked for this last waltz.

"It will take you so long to unhook your sabre and sabre-tache," she said, moving a single step backward.

"Then I'll dance as I am."

"Merci—and my gown?"

"But—"

"No, no; the waltz is nearly ended. See! the musicians are yawning up to heaven."

She took another little backward step, looking up at me from under her curled lashes, defiant, mischievous, yet with something in the curve of her red lips that softened the harshness of my disappointment.

"Why do you avoid me?" I asked, bluntly.

"I? Avoid you, Monsieur Hardy?"

"Yes. Why?"

"Dear me, what an absurd question!"

"Absurd or not, tell me. Why?"

"How can a woman tell what she does anything for?" she said. "You can't buy reasons, like raisins, at Frivolity Fair. Good-night, monsieur the proverbial pilgrim."

To my chagrin, the music ceased; the Duchess and Bettina, flushed and breathless, came up from their romp, and de Ruyter attended them to the great staircase. There I also took my leave of her Highness, who impulsively stretched out her jewelled hand, standing on the first step, and I bent and touched it gravely with my lips.

"What shall we do without our aide-de-camp?" she said, with her pretty, serious smile.

"What shall we do with him?" murmured the Countess, leaning on the balustrade.

Bettina laughed, and tossed a bunch of white violets down at me, which flattered me greatly, until I noticed Osborne behind me. It is difficult sometimes to tell when a woman is looking at the man behind you—and I am a modest man, too.

In the conservatory half a dozen officers sat smoking and sipping their fiery eau-de-vie-de-Wiltz, a species of rose-wine, unfavorable to sobriety and silence.

"Don't touch it," said Osborne, as I sat down beside de Ruyter, who, alone of all the company, stuck to his Holland schnapps.

Latrille and Toxé, in full uniform, looked up sneeringly as Osborne and I ordered a couple of glasses of Diekirch beer—the finest beer in the world, not excepting the most famous brews of Munich and Pilsen.

"You are right," observed old de Ruyter. "Rose-wine and wagging tongues set church-bells tolling for a fool's requiem."

"Go on with your story," said Toxé to Latrille; and that weak-faced young man began one of those scandalous histories that seem inevitable when moral gentlemen prepare to part for the night.

The story was weaker and more vicious than the teller. Toxé laughed, Giroux grinned, and two very young officers slapped their knees and looked wisely convulsed.

"Really," said I to Latrille, "you tell the story so well it is a pity it is not worth telling."

Latrille looked at me, confused; Toxé said, with a covert sneer,

"Even an American could scarcely call the story immoral."

"No," I said; "but if the story were as bad as the way it was told, I think even a German might have been shocked. Don't you?"

Then a very young officer began a discourse to prove that men were vastly more moral than women, but Osborne said, "Les hommes veulent trouver chez leurs femmes assez de vertu pour pouvoir s'en passer," and everybody laughed.

"I think," said Toxé, turning his evil, pitted face to me, "that a woman would rather a man ruffled her modesty than rumpled her gown."

I said, "You have doubtless been in positions to judge the effects of both."

"Gentlemen!" said de Ruyter, coldly.

Osborne, resting his arm on mine, finished his beer and stood up.

"Come, Gilbert," he said; "there's a hunt on to-morrow, you know."

"A gentleman can always find nobler game," said Toxé, distinctly.

"You are very hard on the *wild* pigs," I said, looking at him closely.

He turned pasty with fury and pushed back his chair, but old de Ruyter struck the table with clinched fist, upsetting and shivering glasses and decanters.

"Nom de Dieu, assez!" he roared. "Who dares follow a quarrel under his Highness's roof and in the presence of his Highness's adjutant? Colonel Toxé, sit down!"

Toxé did not move.

"Sit down!" repeated de Ruyter, with a terrible light in his near-sighted eyes.

Toxé sat down.

"Monsieur," said de Ruyter, turning to me, "your attitude, as his Highness's aide-de-camp, is neither dignified nor wise. I beg you to withdraw your offensive expression—offensive to every man at this table."

I bowed instantly to the old man, reddening at his reproof.

"I had no intention of offending any *gentleman* present," I said; "and if I have, it will give me the greatest pleasure to offer any satisfaction—"

"Silence!" cried de Ruyter. "That is not what I meant."

"Oh," I laughed, "it was merely a general compliment to you all."

"Come, come," muttered de Ruyter, trying not to smile.

So I frankly told them I was sorry their susceptibilities had been injured, and I agreed with de Ruyter that this was not the place to discuss differences.

"Nor anywhere else," he said, roughly.

I looked directly at Toxé, then smiled, and waited.

Toxé, at de Ruyter's command, withdrew his covert offer and threat, and apologized to the company, with lips that trembled, and scarcely bottled up a rage that creased his ugly white face till every pitted mark stared out distinct and horrible.

Then I went away with Osborne, who sniffed, and made ironical comments on my diplomatic tact, assuring me that when the Duke heard of it he'd pack me home, and his Excellency would hurl his curse and my valise after me. Which proved partly true; for next morning his Highness sent for me and for Toxé, and between him and his Excellency I never in all my life had such a verbal drubbing.

Toxé and I shook hands—a painful operation for us both; and an hour later, humiliated and ashamed, I went to my room to dress for the first official boar-hunt of the season.

[TO BE CONTINUED.]

Chinese Proverbs

BUILD not your house by robbery, or wrong,—
For gains unlawful do not linger long.

Good Fortune does not last a thousand days—
Like Summer's rose, brief is the time it stays.

JOEL BENTON.

LONDON

June 24, 1899.

THE news from the Philippines, reaching London through private sources, is not encouraging. Speculation has begun as to whether the United States, in the long-run, will find the game worth the candle of holding and governing their new Eastern possessions. While it is no part of the functions of a judicious London correspondent to give his own views on public affairs, he fails in his duty if he omits to notice any qualified body of opinion touching great American interests, even when opposed to the sentiments prevailing across the water. Trustworthy evidence has reached me that the situation in the Philippines is graver than is represented in the English press, and that further re-enforcements on a large scale will be necessary before the United States can settle down to the peaceful enjoyment of their Eastern empire. According to the information on which I rely, a force of seventy thousand men will be required before American possessions in Asia are at peace—a force about equal to the white garrison of British India. The cost of despatching and maintaining such an army for one year, together with the necessary administration, will scarcely be less than $80,000,000. Looking at the other side of the balance-sheet, the population of the Philippines is now estimated at eight million, and according to the latest figures the imports are $10,937,500, and the exports $20,756,250: together, $31,693,750. Of this amount Great Britain imports $6,439,150, while the exports of British produce to the Philippines are $2,001,330. In other words, Great Britain enjoys, and is likely to enjoy, the lion's share of the benefits arising from the lavish expenditure of American life and treasure in the conquest of a group of islands principally remarkable for the vileness of the climate and the turbulence and bigotry of their half-nude population.

UNDER these circumstances, the unaffected pleasure with which the average Englishman has witnessed the substitution of the American flag for that of Spain in this Oriental Alsacia is easily intelligible. Sincere friends of the United States, however, are completely at a loss to understand the grounds for a policy of expansion which, under all conditions, involves enormous cost, even if every dollar of the Philippine trade flowed into American coffers. The administration of India is only possible to England because Hindustan is rich enough to give the British garrison free quarters and to pay the cost of the civil administration. If the Indian budget were to exhibit any such deficit as that which is inevitable in the Philippine balance-sheet, it is certain that the electorate would decline the barren honor of an imperialism that touched their pockets, and would promptly relinquish their Asiatic possessions. In other words, England holds on to India because it is profitable to do so. Colonial authorities who have made a study of the situation tell me that, in their opinion, the American public will soon discover that the cost of holding the Philippines is out of all proportion to the possible benefits to be received, and that the burden imposed on the American tax-payer will involve either the evacuation of the islands or such arrangements with the insurgents as will reduce the cost of American control to a nominal sum. If these views are not articulated in English newspapers it is because the average editor is too patriotic to say anything that might suggest the retirement of the United States from a position favorable to British commercial interests in Asia. Hitherto England has paid for the open door through which Americans have passed. That the United States should pour out life and treasure like water for the benefit of the world is entirely in accordance with British ideas.

MORE than a century of constant practice in the recruitment and relief of troops in India has been necessary before the 214,928 men who comprise the British and native army were brought down to an average cost of 1120 rupees each per annum. In addition to the cost of maintenance, the health of American troops in the Philippines will require the construction of proper barracks, the quartering of a large number of the soldiers at hill stations, and even more frequent reliefs than are found necessary in India. According to my information, the opinion of the officers and men of the American army now in the Philippines is practically unanimous that a mistake has been made, and that the sooner this mistake is frankly recognized, the fewer lives will be lost and the better for the republic. Tropical colonies that do not pay the cost of conquest and administration debilitate the mother-country.

SOUTH-AFRICAN news to be reported this week is practically restricted to the ripening of public opinion. Ostensibly no special preparations are being made by the War Office, but every arrangement has been effected for the despatch, from India and England, of a force of about 32,000 men to the Cape and Natal. It is generally assumed that the commander of the expedition will be Sir Redvers Buller, whose experience in South-African warfare is second to none. I understand, however, that it is premature to announce that Sir Redvers Buller will be appointed. If there is a war with the Transvaal the present government cannot afford to throw away any chances. It is known that Lord Kitchener returned unexpectedly from the Sudan, that he is in constant attendance at the War Office, and that he has made a moral conquest of Lord Salisbury, in whose hands the appointment of the general officer commanding entirely rests. In the event, therefore, of hostilities breaking out, it will not be surprising if Lord Kitchener receives the command. His appointment would be popular, and in such a war the ministry would require all the help they can get from public approval. Modern democracy here requires quick dramatic success in war. If this cannot be obtained the great heart of the people prefers peace. Mr. Kruger perceives this elemental fact, and will probably spin out operations if war breaks out.

THE expenditure of Boer secret-service money in London has attained scandalous dimensions. It is within my knowledge that one writer, whose name is constantly before the public as an active advocate of Krugerism, is

HOW THE HORSES DIED FOR

DRAWN BY FREDERIC RE

OR THEIR COUNTRY AT SANTIAGO.

C REMINGTON.—[SEE PAGE 700.]

the literary mercenary of the South-African republic. A speech of Sir Henry Campbell-Bannerman, the leader of the Opposition, has aggravated the situation by enabling the Boer agencies to represent British opinion as divided. It cannot be too often repeated that the question at issue is not whether the Uitlanders shall have the franchise, nor even whether they are badly treated by the Boers; the question is whether the British or the Dutch are to predominate in South Africa. Before very long that question will be irrevocably determined.

THE by-elections are going against the government. General Wauchope, who commanded a division at Omdurman, appeared as a Unionist candidate at Edinburgh with the sand of the desert on his boots. He was Mr. Gladstone's opponent in Midlothian in 1892, and enormously reduced the majority of the Grand Old Man. He is a good landlord, a brave soldier, and an honest politician, but he was soundly beaten at the polls by a home-rule barrister of socialistic tendencies, belonging to a family of whiskey-distillers. The effect of the Edinburgh elections is to bring back home-rule into the arena of practical politics. The two Radical candidates for Edinburgh adopted home-rule as a plank in their platform. It is unlikely that they did so without consultation with their political chiefs. At the next election, therefore, the Radicals will once more buy the Irish vote, and will again obey the crack of the Irish whip. In that event the next Parliament will not be a long one. The House of Lords, albeit weakened by profuse creations of rich nobodies into hereditary legislators, will repeat its stroke of 1893, when home-rule was sent about its business with the placid consent of an electorate always impatient of whatever government happens to be in power.

IF all England were polled as to the subject of the widest interest, probably the recent defeat at cricket of the representative English team by an Australian eleven would win easily. England and India have nearly 340,000,000 people from whom to choose a representative cricket eleven. Australia, with about one-seventieth of that population, has sent over a team which has soundly drubbed the best English eleven that could be got together. Pessimists of course declare that the sun of England has set; that degeneration has begun. Whatever the cause may be, there is no doubt that the exemplary beating inflicted by the triumphant Australians on the flower of English cricketers, including Prince Ranjhitsinghi, an Indian graduate of Cambridge University, is a sign that something is wanting in the organization of our national sport. Cricket authorities are nearly unanimous in attributing the defeat to the simple fact that the Australians are better men than the English, and, being in the habit of playing together, produce results impossible to cricket geniuses who are not accustomed to one another's play.

IN rifle-shooting, also, England was last of all in the international rifle match under the auspices of the Royal Netherlands Rifle Association, just held at The Hague. Switzerland, France, Denmark, Italy, Holland, Norway, Belgium, and England competed. Each nation was represented by five marksmen firing 120 shots at a range of 328 yards—40 standing, 40 kneeling, 40 prone—with ten trial shots. The competitors finished in the order named, a result sufficiently disappointing when it is remembered that for forty years rifle-shooting in England has received attention from 200,000 men.

ARNOLD WHITE.

How the Horses Died

HAVING reached the firing-line, many officers left their horses tied to the brush on the sands of San Juan River. Baggage and gun mules were turned loose, and stood stupidly about. There was a constant tweet of bullets coming through the trees from the Spanish position. One horse caught three almost in a bunch; another passed through him, and he lay down on his side, panting desperately. A big gun-mule lay on his side gasping, and another horse sat down like a dog, giving every evidence of great pain. A ball cut the skin on a mule's knee, but he only stamped the leg as though to get rid of a troublesome fly.

The thing about it which was strange to me was that the horses which were untouched seemed sleepy—they gave no evidence of excitement except a slight pricking of the ears toward the hill. One almost wondered if they suspected that things were not right. Even the blood which was all about on the sands, from horses and men, did not have its general effect of scaring them.

Why do not horses die for their country? They do not have a previous intention of so doing—the act is not voluntary. Well, possibly. Neither does a conscript die voluntarily, or a man put war-stamps on checks voluntarily, but it's for the country just the same. A mule does more work for his country and more suffering than a man. It also takes more revenue stamps to keep him going. But why speak of these things? It is sufficient to know that all soldiers respect and honor all mules.

FREDERIC REMINGTON.

The RECONSTRUCTION of CUBA

By Franklin Matthews

XIV.—THE SUGAR PROBLEM IN CUBA

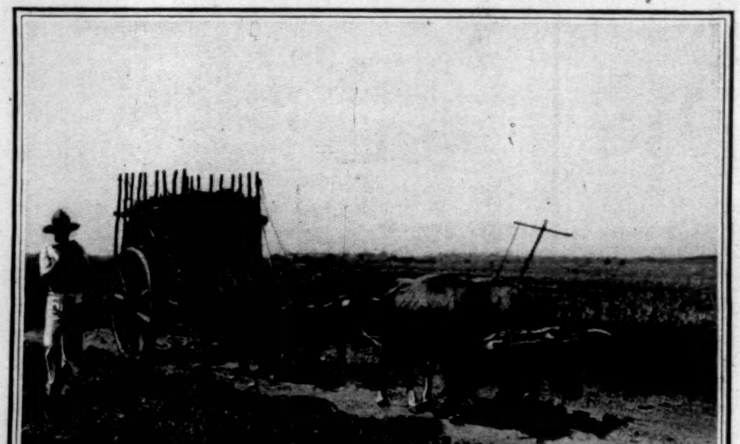
THE prostration of commerce in Cuba during the war with Spain was caused in large part by the almost complete ruin of the sugar industry of the island. Cuba has been called an immense sugar-producing plant. That industry has been, and undoubtedly will continue to be, the chief one in the island's commerce. With the exception of the tobacco industry, every other form of business is subservient practically to sugar. The cane is not native to the island, but there is no place in all the world where it thrives better or produces more satisfactory results. When the entire island became a theatre of war, the conflict was largely an effort on the one side to keep the sugar-plantations going, and on the other to destroy them.

The most deplorable sights in Cuba after the war closed, barring the starving widows and children, were the burned sugar-mills. A destroyed village could be rebuilt easily, nature being prodigal with raw material for huts. The twisted machinery in the charred ruins of a sugar central told a story that meant a far more complicated problem. Not only was there the question of the ability to secure capital involved, but the political problems of the future were wrapped up in it. You could see those ruins from railroad trains on every side, and when you considered how much the sugar industry meant to Cuba, the outlook for prosperity was gloomy. On the other hand, many sugar centrals were in operation in March and April, and some of them had fresh paint on them. These were mills that had immense capital behind them, and had survived the dangers of the torch at a most costly outlay. It was estimated that about one-half of the sugar centrals in the island were destroyed. Those that survived were the larger and more important ones. So when the war was over, the sugar industrial situation was not so bad as it seemed at first, for there was a good foundation upon which to start afresh.

But the production of sugar is dependent upon other factors than mills. The matter of securing the cane is the chief thing. The cane-fields were laid waste as far as possible. When one recalls that a single large sugar-mill in Cuba often draws part of its supply of cane from fields as far distant as fifty miles, the complications in the production of sugar during such a war as raged in Cuba are obvious. A field of sugar-cane lasts from five to seven years, and then it is worn out, and a new stock is planted. The cane does not propagate itself. After it is planted one gets a crop in twelve or eighteen months, according as the planting season varies from the cutting season. The fields have to be renewed constantly and systematically.

The production of sugar to-day in Cuba, as elsewhere, is chiefly an agricultural problem. The opinion has been general that the most important side of sugar-making lies in the sugar-mill. A few years ago that might have been true, but, owing to competition and the perfection of manufacturing methods, a change has come over the industry. It is open to any man who has the capital to set up a sugar-mill, and by the use of ordinary business methods to make as much money as his neighbor in the sugar-manufacturing business. Whatever improvements and economies are to be made henceforth in the manufacturing side of sugar production must be of a minor character. The point is to secure the cane, which involves the control of the cane-producing land. Sugar-cane being a vegetable product, many persons have thought that, having the vegetable supplied by nature, the problem of securing sugar remained exclusively with the manufacture of it, and that the chief economy involved was to get every bit of sugar out of the cane that was possible. The problem is far deeper than that. The key to it is a constant and steady supply of cane delivered to a mill at a minimum cost for growing and cutting and hauling, to which is added a minimum cost of shipping to the refinery after the raw sugar has been made. A sugar-refinery, no matter how scientifically equipped, is likely to be a most expensive toy, unless there is complete co-ordination between the manufacturing and agricultural sides of the industry.

There are few more complicated and more delicate business operations than running one of the immense sugar estates in Cuba. The value of the plant, if it owns its own lands, is usually from three to five millions of dollars. On some of the plantations there are towns of from 1500 to 2000 inhabitants. There must be a working capital of from $500,000 to $1,000,000 to operate the plant. Some of the plantations own and operate as much as from fifty to sixty miles of private railroad. There are immense repair and machine shops on the estates. Not only must several thousand men be employed and cared for, but they must be kept at work systematically. To supply certain mills with cane during the grinding season, from fifty to seventy acres of cane must be cut every day, and hauled from fields to trains, and then carried miles away to the mills. The slightest break in the supply of cane means great waste of resources, for after the saccharine matter is squeezed from cane the fibre is used for fuel to run the plant. The use of coal and wood, owing to their cost in Cuba, for such purposes for any decided length of time would ruin the plant. Then there are the matter of shipping the product after the sugar is crystallized, the purchase of food for men, women, and children on the place, the financial operations involved in always having money on hand for wages and other operating expenses, and the thousand and one details of business life affecting directly the daily life of thousands of persons—all to be studied and worked out.



BRINGING THE CANE IN FROM THE FIELDS.

To understand what the problems in the conduct of such an estate were I spent some time on the well-known Constancia sugar estate, ten or a dozen miles up a small river from the city of Cienfuegos. It is a picturesque journey up this river, bordered as it is with royal palms and a thick undergrowth of shrubbery here and there. Great numbers of pelicans were flying about or dozing on trees or shrubs. Far away one might see the tall smoke-stack of the central standing out on a sloping hill-side, a beacon of industry to all the country roundabout. One of the little cars drawn by a mule, such as one sees at many railroad stations where there is a central near by, waited at the steamboat-landing to carry one up to the plant, half a mile inland, and just beyond a beautiful grove of palm-trees. A dozen or more large buildings make up the plant at the central, and the many railroad sidings, the locomotives and cars belonging to the place, the large number of men employed, form a scene of activity, such as is seen only in very large plants in cities devoted to manufacture rather than in countries where agriculture is the chief pursuit.

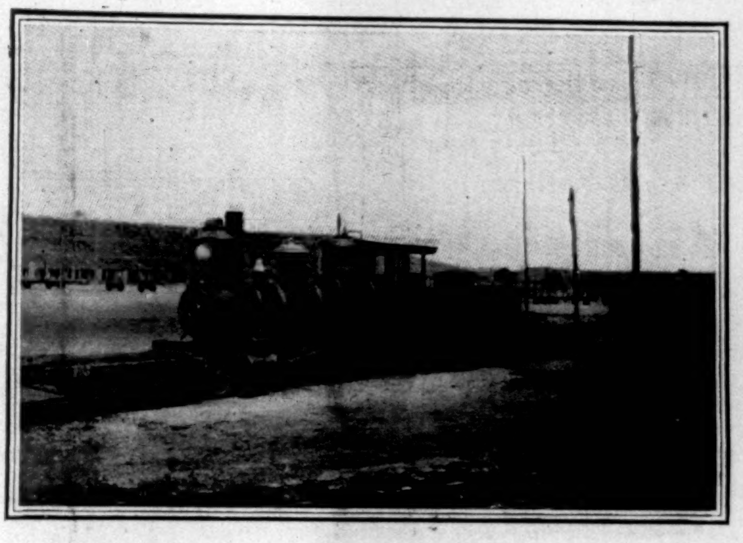
A short time before the insurrection started Marques de Apezteguia, the owner of Constancia, formed a company to operate the plant, most of the capital being secured in this country. It really became an American corporation, the president of the company being Mr. Osgood Welsh, of New York city. Marques de Apezteguia remained in active charge of the enterprise to direct its fortunes. The war had a blighting effect upon the place. It was necessary to equip about eight hundred men with arms to protect it. Block-houses were built about it, and there were fully forty skirmishes with the Cuban insurgents, who tried many times to destroy the plant. There was some bloodshed in these fights, and a constant state of fear and agitation, but Constancia was saved. Before the war ended, the provisions ran low, and almost all the cattle had been used up for food. The women and children worked in the fields to a large extent, and by the most careful and persistent effort work of some character was carried on all the time. The owners assert with pride that they never paid a cent to either side for protection, and there are many men conversant with the sugar situation in Cuba who declare that it is probably the only plantation in Cuba of which this can be said.

Constancia, although second in rank of the sugar plants in Cuba, has one advantage over the others in that it is on tide-water and can send its sugar on lighters direct from its mill to vessels in the harbor of Cienfuegos, only a few miles away, there to be loaded for shipment to this country at minimum cost. The other factories, almost without exception, have to send their sugar to some port by rail, and any one who knows what the ruinous rates of freight in Cuba are can understand what an advantage Constancia possesses. It means that it can produce raw sugar a margin of a cent cheaper than any plant of large size in the island. That margin may mean the difference between a profit and a loss. What a plant of this size consists of may be conjectured from a few statistics.

There are 66,000 acres owned by the company. There are nearly fifty miles of private railroad under operation to bring the cane from the fields to the factory. Six good-sized locomotives are used in this work, with fully 200 cars of various kinds. About 1200 men are employed in the fields and 300 in and about the yards and buildings of the central. The capacity of the land is sufficient to produce 80,000 tons of sugar a year, and the capacity of the mill is equal to about 30,000. The mill uses up about 3,000,000 pounds of sugar-cane a day, and

has produced as high as 21,000 tons of sugar in one grinding season. In the yard of the central there are sixteen acres of land, with nearly six miles of railroad sidings. Among the main buildings are the sugar factory itself, a distillery, machine-shop, lime-kilns, foundry and carpenter-shop, electric-light plant, an extensive trolley system for moving the cars which bring in the cane about the yard, an elaborate telephone central office by which a train-despatcher moves his cars miles and miles away—just as the train-despatcher on many a railroad operates his cars. The machine-shop of the place is the most extensive private plant of the kind in Cuba. Then there are tugs and lighters used for taking the sugar to steamships in the harbor.

It is most interesting to watch the plant at work. The great loads of cane are taken to the crushers, and then the juice goes one way to be boiled and cooked, until the crystals are whirled about in centrifugals and the sugar is packed and shipped. The fibre goes another way, to be used in the great fires which keep the plant going. There is a great bustle in unloading and shifting the cars in the yard, and a constant economy to prevent waste that to an ordinary observer would seem of little importance, but that to the initiated is known to be vital to the prosperity of the place. If one is growing sugar-cane and making sugar from it, no false moves must be made. When more than a thousand men are at work in the fields, principally cutting the cane; when hundreds of ox-carts are drawing the cane to the cars, and a half-dozen trains are hauling it to the mill miles and miles away; when provision must be made so that night and day for, say, four months there must be no lack of fuel and no cessation in the flow of the cane-juice, or else a ruinous expense follows; when more than 100 tons of sugar must be made and shipped daily—one realizes the importance of entire business harmony in every part of the plant.



LOCOMOTIVE IN CENTRAL RAILROAD YARD, CONSTANCIA SUGAR-PLANTATION.

To emphasize the fact that the production of sugar is chiefly an agricultural question, it should be remembered that it costs about one cent and a half to produce a pound of sugar in Cuba, and of this almost exactly one cent is the cost of the agricultural side. The cost of manufacture having been reduced practically to a minimum, it is on the agricultural side that further economies must be made in the reduction of cost. It is to this end that the trolley system is being introduced in the yards of many centrals to shift the cane after it arrives from the fields. It is also to this end that constant experiments are being made to cheapen the cost of cutting and hauling the cane to the central. From ten to twelve per cent. of the weight of the cane is expressed in juice at the factory, but only from seventy-five to eighty per cent. of the sugar in the cane is squeezed out under present methods. The problem of getting all the sugar out of the cane has not yet been solved, nor are all the matters of conserving labor in the fields settled. A plantation the size of Constancia requires 1000 oxen, 250 horses, and 100 mules, as well as its other equipment, to operate it successfully. When one also considers that there are several thousands of persons upon a plantation, with probably three or four good-sized towns, the question of government plays an important part, and the moral responsibility to give the people as much work as possible, as well as to prevent them from being discontented, becomes a matter of grave import.

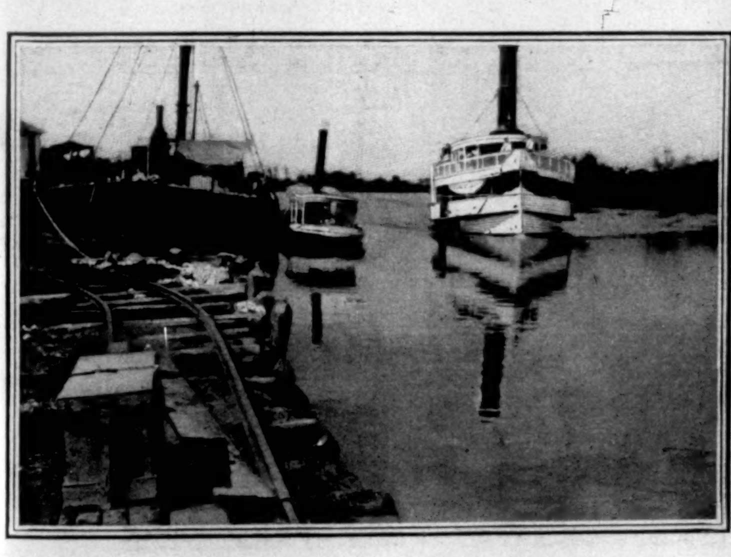
Sugar plants in Cuba which produce their own cane and make their own sugar are known as ingenios. Those which grow the cane but do not make the sugar are known as colonias. There are thousands of colonias in the island. These suffered greatly from the war. The owners of these deliver their cane to the factories within easy reach, and the custom is to pay them six per cent. of the weight of the cane-sugar. In other words, the purely agricultural producer of the cane goes half-shares with the manufacturer, the total amount of the sugar secured from the cane being about twelve per cent. On most of the colonias cane-cutting is done by contract. The contractor cuts the cane at the rate of $1 50 for 100 arrobas—a weight of 2500 pounds. He pays his workmen from forty to fifty cents for the actual cutting, and the rest of his expense is in loading the cane on the cars by the use of his ox-carts and delivering it to the factory. Some of the laborers, however, prefer to work for themselves and not for a contractor. Three of them usually combine, two doing the cutting and one doing the hauling with his ox-cart. These ox-carts may be seen at almost any railroad station in the sugar-growing districts of the island. They are picturesque, and the old Roman way of yoking the oxen by the horns gives an insight to the indifference of the Cubans to suffering by any one or by anything except themselves. It is lack of oxen that will cause serious delay in the restoration of prosperity to the island. Trained oxen cannot be procured right away. The island was swept almost bare of them. Cattle were being shipped in from Mexico and Venezuela and other places early in the year, but the Marques de Apezteguia told me that the island needed at least 600,000 cattle before normal conditions on the plantations would prevail. The pay of the laborer in the fields runs from forty to fifty cents a day, but if the employer has to feed his men meat at a high price for cattle, the problem of the cost of producing sugar is enhanced to an alarming extent. The cost of meat before the war in Cuba was about four and one-half cents a pound. In the early months after peace came the cost of meat was fully twenty-five cents a pound.

CUTTING SUGAR-CANE, SHOWING THE CANE STRIPPED FOR CARTING IN THE FOREGROUND.

An excellent idea of the condition of the sugar industry in Cuba at the close of the war may be obtained from the notes, to which I have referred frequently, taken by General Wilson on his trip in January through the province of Matanzas. General Wilson visited the large sugar-central Santa Gertrudes, two miles from Banaguises, and as he was looking over the plant he made inquiries as to opportunities for Americans to grow sugar-cane in Cuba, and asked about the cost of land. Mr. Mendoza, the proprietor, said:

"I have bought caballerias [a caballeria is thirty-three acres] at $100. Americans would have to pay for good land, say, $150 a caballeria, or about five dollars an acre. One of these caballerias will turn off about 70,000 or 80,000 arrobas; the next year twenty per cent. less, and the following year twenty per cent. less. I used to replant about forty or fifty caballerias every year to replace the cane that was wearing out. I am free to say that I think the future of Cuba will be better under American rule."

While visiting the Conchita estate, near Union, José Antonio Freyre, the manager, told General Wilson that he had spent $50,000 last year for oxen, and that this year he would spend the same amount. He said the sugar estate needed at least 900 more working-cattle. He was buying cattle from Mexico, and thought the age of five years the best. After the oxen are secured they have to be trained. The Conchita ingenio has a tributary area of sugar-growing lands twenty miles long and ten miles wide. This area is said to be among the best in Cuba.



RIVER STEAMBOAT, TUG, AND SUGAR-LIGHTER AT THE LANDING, CONSTANCIA PLANTATION.

Among other sugar estates also visited by General Wilson was that of Occitania, owned by the Himely family of New York. The manager is Mr. William Himely, part owner of the estate. He told General Wilson that he had plenty of cane for his capacity in grinding. One great difficulty was to get sufficient ready money for use. He had only about 30 yoke of oxen, but was employing about 600 men. The ingenio was started in 1847, and had missed grinding only one year. He said that capitalists were timid about making advances on sugar estates during the war because they feared that the properties would be destroyed. Now that the war was over, they still were reluctant to put out their money in loans for the working capital of the estates, because of uncertainty as to the island's political future.

An illustration of Spanish indifference and almost treachery toward the sugar-refining industry of the island was noted by General Wilson in his visit to Cardenas. Here is what he jotted down in his rough notes:

"Visited large sugar-refinery, the third in size in the island. It was not in operation. Formerly turned out 200 bags of sugar a day, the bulk of their product going to Spain. Being ambitious, they increased the capacity of the plant to 1000 bags a day, and increased the capital stock from $200,000 to $1,000,000. Just when they had commenced to reap the benefit of their increased business, the Spanish government, in order to protect the sugar interests of Malaga, placed a prohibitive tariff on sugar, and this concern was forced to close."

Few persons understand the necessity of running the sugar-mills night and day during the grinding season in the spring of the year, from four to five months. It is because the raw material deteriorates if kept for any length of time. The sugar in the cane dries up if the cane is not crushed promptly. After being harvested it cannot be kept like cereals. Grain and cotton may be kept for a long time before it is transformed into the finished product. It is not so with sugar. The most expeditious action is necessary if the full available strength is to be procured from the cane.

The crop of sugar in Cuba for the current year has been estimated roughly at about one-half the usual production. It may have reached 500,000 tons.

All sugar is produced from two sources—the sugar-cane and the sugar-beet. The cane grows in tropical countries almost entirely, the fields in Louisiana, in our own country, being a small and almost inconsiderable part in the vast output. The beets grow in the temperate zone. It has not been proved that raw sugar made from the beet can be produced and landed at the refinery at two cents a pound, and hence one can see what an advantage Cuba has in her great industry. It is for that reason that the question of the ultimate annexation of Cuba to this country may play an important part in our national life. We all remember what a row was caused by the beet-sugar men and the cane-growers of Louisiana over the tariff a few years ago, when it became necessary for the success of the McKinley bill to pay a bounty for sugar produced in this country in competition with free sugar from other countries. The sugar problem always complicated the relation of Hawaii to the United States before annexation. Should Cuba become an integral part of the United States, another tariff row will undoubtedly result. It is for that reason that the probabilities that Cuba will ever become more than a colony of this country are remote. It is only fair, however, to the Cuban sugar-producers to say that while for business reasons they would prefer annexation to this country, they all declared, so far as I was able to get their personal sentiments, that they would be satisfied with an American protectorate or a colonial government. All they wanted, they said, was a settled condition of the politics of Cuba. They declared that under the present tariff conditions they could make money, and that if the time of the mortgages were extended, which has been done, they saw a profitable future ahead of the industry in the island.

Such, in a general way, was the condition of the sugar industry directly after the war ceased. The future of the industry was summed up for me in these words by probably the best-informed man in Cuba on the subject:

"Prosperity in the sugar industry in the future in Cuba lies along a very simple line. It is the ownership or control of the lands suitable for growing the cane, and so situated that the expense of transporting both the cane and the sugar made from it is at the minimum."

Small Palace. New Avenue Nicholas II., leading to the new Alexander III. Bridge. Grand Palace of Fine Arts.

THE PARIS EXPOSITION OF 1900—PROGRESS OF THE WORK ON THE NEW BUILDINGS.

DRAWN BY E. C. PEIXOTTO, PARIS, 1899.—[SEE PAGE 705.]

AMATEUR SPORT

COMMENDABLE and painstaking study of the needs of the golfing situation is revealed by the revision of the important Sections 9 and 10 of the United States Golf Association by-laws, which the Executive Committee has recently given us.

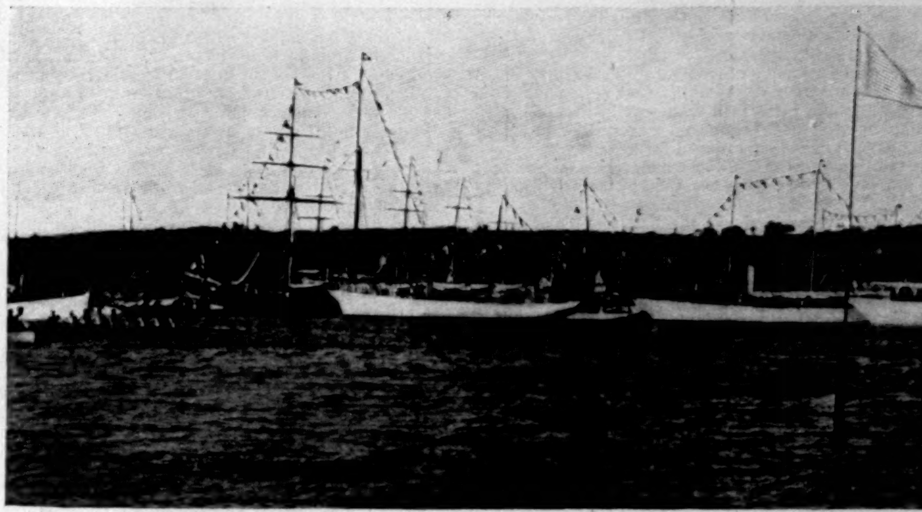
SECTION 9.—No person shall be considered an amateur golfer who has played for a money prize in a match or in an open competition, or who has received money for giving lessons or exhibitions of his skill in the game of golf; or laid out or taken charge of golf-links for hire; or who has ever carried clubs for hire after attaining the age of fifteen years; or who has ever personally made for sale golf clubs, balls, or any other articles connected with the game of golf; or who, after the adoption of this section as amended, shall be classed as a professional in any athletic sport.

SECTION 10.—No person shall be eligible to compete for the amateur championship of this Association who does not conform to the conditions of Section 9, or who, after January 1, 1897, has received compensation for services performed in any athletic organization, or who plays the game or frequents golf-courses for the purpose of exploiting his business; nor shall any one be eligible to compete who hereafter shall enter any golfing competition under an assumed name.

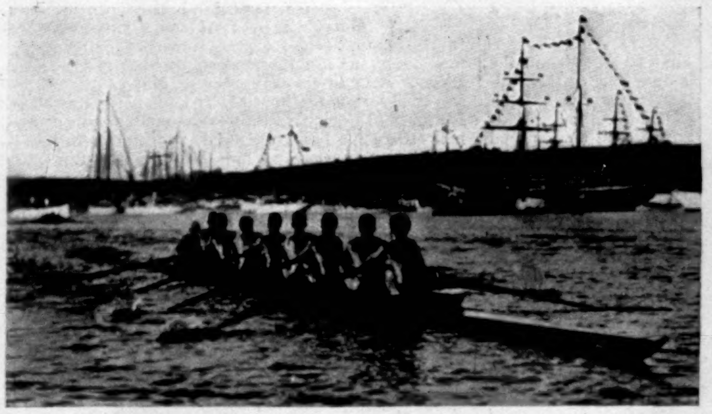
Any person having become ineligible by a violation of any of the provisions of this section may be duly reinstated upon his giving satisfactory evidence of meriting it.

Only members of clubs belonging to this Association, and those entitled, under the rules of an associate or allied club, to the use of the links, in whole or in part, for a period not less than the entire current season, may compete for the amateur and women's championships.

Competitors must enter for the championships through the secretaries of their respective clubs, who, in sending in their names, shall be held to certify that the players are qualified amateur golfers in accordance with the terms of Sections 9 and 10.



HARVARD FRESHMEN CROSSING THE FINISH-LINE, ABOUT TWO LENGTHS AHEAD OF YALE.



HARVARD WINNING 'VARSITY RACE—YALE AND REFEREE BOAT IN DISTANCE.

The most noticeable feature of these revised rules is the laying down of only broad principles, and giving the Committee full jurisdiction and considerable discretion in their interpretation. Instead of laboriously compiling a long list of those who are and are not amateurs, the simple statement is made of what a golfer may not do and remain an amateur, and for the rest the Executive Committee has the power of deciding on cases, not specifically covered by the sections, in accordance with their individual merits.

MOST timely of the definitions is that touching the status of the golfer employed in mercantile houses selling sporting goods. According to the revision, stockholders in such establishments, salaried people connected with them, or writers on golf are not made professionals, unless they use the game or the scene of it for the purpose of exploiting their business.

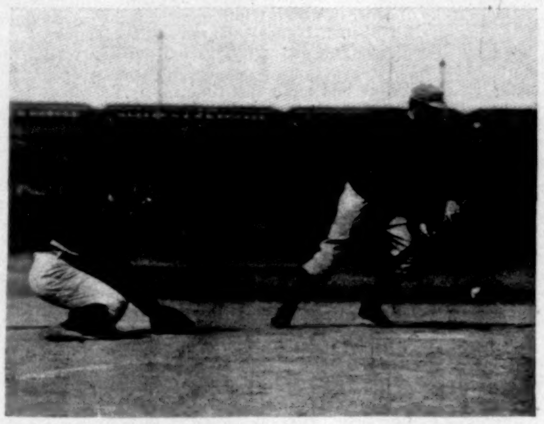
Which means that the salaried representative or member of a mercantile firm who drums up business on the links, or the reporter or owner of a paper who frequents tournaments to secure subscriptions, becomes ineligible to amateur tournaments.

And that is quite as it should be. Golf has suffered from the invasion of drummers in the guise of sportsmen. On the other hand, sportsmen have suffered by the indefinite wording of the rule on this point,—so it is satisfactory to have the rule clear and forcible.

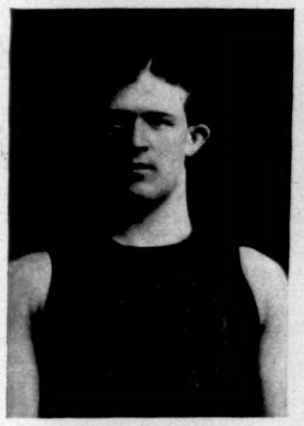
Another excellent and equally needed provision is that disqualifying for the championship those who have played in any golf tournament under an assumed name. Few realize how important is this provision, since it touches the very essentials of amateur sport. In keeping with the wisdom that prompted this ruling is that other provision classing as a professional in golf whosoever may be classed as a professional in any other sport.

NO specific rule has been made to cover betting, which I am disposed to regard as unfortunate, since it seems to leave the work of the Committee incomplete, and yet I am not unmindful of the difficulties confronting any attempt to legislate on this question. It may be said—it has been said, indeed—that to legislate on betting is to legislate on one's private affairs.

But that is rather far reaching for an excuse to avoid issue on the question. The same excuse might be offered for every infringement of the amateur law brought to the attention of the Executive Committee. Might it not be argued with equal truth that to give lessons for hire, or to tout for a certain make of club, comes also under the head of one's private affairs? So far as that goes, everything proscribed by the Golf Association and other organizations governing various branches of amateur sport might be excused under a "private-affairs" clause.

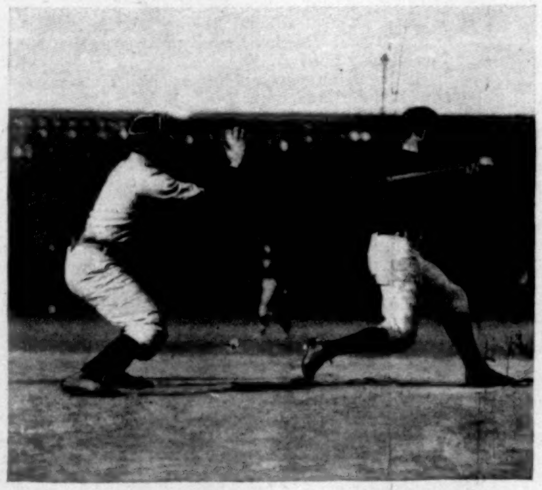


HAUGHTON BUNTS.



J. F. POWERS.

WADDELL SAFE AT FIRST.



REID BEHIND BAT.

LOUGHLIN SCORES.

HARVARD COMING ON THE FIELD.

It is not for an Association to consider what are private affairs and what are not—it is their mission to consider what attacks the amateur principles of the sport for whose purity they stand as sponsor.

The very first principle of amateur sport declares a man may not play for money. Whether that money takes the form of a "money prize in a match or in an open competition," or whether it becomes a wager, the fact that it is still money, and is being played for, remains.

It is the jingle of the shilling which separates amateur from professional—perhaps the Committee will come to realize this as the sole dividing-line one of these days.

The present revision shows the first intelligent grasp the Committee has secured of the golfing problems, and a difficult piece of legislative work has been well done. For these questions are perplexing and not to be settled off-hand. The new rules unmistakably breathe concern for the best interests of the sport, and deserve the approval and support of all sportsmen.

HERBERT HARRIMAN'S defeat of Findlay Douglas (by 3 up and 2 to play) on the Onwentsia links, Saturday (8th), for the amateur golf championship, marks the first national success of a native-bred player, and corroborates the impression given by the earlier work of both men this season. All through the spring and early summer Douglas has shown brilliant scoring play, but a rather indifferent short game in his matches; he repeated the exhibition at Lake Forest last week, and it yielded him a new course record of 80, and lost him the championship. But for all the missing of many short and easy putts, the match disclosed some of the best golf yet seen at an American tournament. Throughout thirty-four holes of play, bogie was equalled fifteen and beaten fourteen times; only two holes (the seventh and thirty-fourth) were won by more than a single stroke, and eleven holes were halved.

It was essentially match play, and the steadier all-round work of the American triumphed. Harriman started off with a rush, driving, approaching, and putting in such form as he has not before revealed, and doing the eighteen holes in 81, to 91 for Douglas. When they drove off for the twenty-first hole (halved), Harriman stood 9 up, and there was somewhat the appearance of a runaway; but beginning with the twenty-second hole Douglas entered upon a period of brilliant endeavor that lasted him through the thirty-third green, and reduced Harriman's lead to 2 up. Evidently the strain was too great, for he badly bungled his play for the thirty-fourth hole, which the American won, and with it the match and championship.

In the long game Douglas was always as good, and more frequently better, than Harriman; in iron play there was so little difference between them as to give neither an advantage; in putting Harriman had much the better of it up to the twenty-second hole, from where to the end short-game honors were somewhat in Douglas's favor, due to his masterful approaching.

Harriman has been playing four years; he failed to qualify for the national event in '96, was put out in the third round in '97 by W. R. Betts, after beating Tyng, and did not enter in '98. He first disclosed really high-grade skill this year at the Metropolitan championship, which he won from W. J. Travis in nineteen holes. As compared with Douglas, who shows the easy, graceful St. Andrews swing, Harriman's form, which includes a three-quarter swing, appears constrained. Nevertheless, the American hits the ball cleanly, gets plenty of force behind it, and has the match-playing quality that counts so heavily. Their scores to the thirty-fourth hole were Harriman, 160, Douglas, 165.

THE tournament emphasized the need of sectional associations with annual play to determine on worthy candidates for the national event. There were 112 entries this year and 98 starters at Onwentsia. Not half of these are yet out of the handicap class, and their appearance among aspirants for national championship honors was presumptuous, not to say ludicrous. Of the thirty-two who qualified, the highest score being 187, sixteen were Western players, which shows how considerable has been the development in that great section; of the seventeen leaders, who made the thirty-six holes of the qualifying or medal round in 180 or better, four were Western, and the lowest score, 168, which won the gold medal, was made also by a Westerner, C. B. Macdonald, who never played better than on this occasion. Macdonald's score, in fact, beats Onwentsia bogie (170), and becomes a record qualifying round. It is six strokes better than his own on the Chicago Club links two years ago, and seven better than J. H. Choate did last year at Morristown. The golf of half the starters ranged from excellent to first-class, while that of the other half ran from mediocre to ragged.

The first day of match play was one devoted chiefly to weeding, but some fell out who had been expected to remain in longer. C. P. Lineweaver beat Jasper Lynch 1 up in thirty-seven holes. H. C. Smith was defeated by H. P. Toler 4 up and 3 to play, and Walter Fairbanks (Denver) beat J. F. Curtis, Jr., the one-time inter-collegiate champion (1 up in forty holes) in a game remarkable for its erratic play.

DOUGLAS made his famous round of 80 on the second day, and gave Forgan a severe beating (13 up) in the bargain. G. G. Hubbard conclusively settled Tyng (5 up and 4 to play), and Macdonald did as much for Holabird (6 up and 4 to play). Perhaps the most interesting match was that between J. G. Thorp, the runner-up in '96, and W. B. Smith, runner-up in '98. Thorp by winning (3 up and 1 to play) proved his play in '96 to have been no mere happy streak of luck, for his game last week showed the same unique form with equal strength and precision. He was especially strong in his short game. Steadier play and a better short game also gave Harriman his victory over R. Terry, Jr. (2 up), while Toler won from Fairbanks (2 up and 1 to play) in a game not up to his best. He did better next day in his match with Harriman—in fact, made 9 holes in thirty-eight, and showed rare skill on his approach shots. He tied Harriman for the eighteen holes, but could not hold the pace, and was beaten out (6 up) in the afternoon. Reid lost to Travis (2 up and 1 to play) by very poor approaching and putting. Hubbard's showing against Douglas was most commendable, and though eventually overwhelmed (7 up and 6 to play), he gave evidence of coming quality.

The Macdonald Thorp match, although won by Macdonald (3 up and 2 to play), was remarkable because of Thorp's brilliant short game; some of his putting was sensational, but Macdonald's long game was too good, and eventually brought him victory. It was not, however, good enough for Harriman, who equalled Macdonald in driving, and completely outclassed him in approaching and putting—finally winning by 6 up and 5 to play.

Douglas failed on some very short putts in his match with Travis, but his long game was so good, and especially his approach shots so true, that they counterbalanced his occasional indifferent work on the green, and he won by 2 up and 1 to play.

A great deal of rainy weather perhaps interrupted some of the social features of the week, but the tournament was managed with high efficiency, everything done by the Onwentsia Club and its president, Mr. Hobart Chatfield-Taylor, for the interest of the players and pleasure of the visitors. A vote of thanks and congratulations are in order.

The qualifying round included C. B. Macdonald, Chicago, score 168; John Reid, Jr., St. Andrews, 170; Findlay S. Douglas, Fairfield, 173; Dr. Forgan, Onwentsia, 173; W. J. Travis, Oakland, 173; H. M. Harriman, Meadow Brook, 174; Walter B. Smith, Onwentsia, 174; R. Terry, Jr., Ardsley, 175; James A. Tyng, Morris County, 175; H. H. Cummings, Swannanoa, 176; W. M. McCawley, Merion, 176; G. C. Hubbard, Harvard, 178; W. Holabird, Jr., Glenview, 179; J. G. Thorp, Oakley, 179; C. P. Lineweaver, Philadelphia, 179; Jasper Lynch, Lakewood, 180; John Stuart, Princeton, 180; F. Sterling Beckwith, Cleveland, 181; Sheldon Cary, Cleveland, 182; Walter Fairbanks, Denver, 185; J. F. Curtis, Essex County, Manchester, 185; Stewart Stickney, St. Louis, 185; A. H. Smith, Huntington Valley, 185; W. E. Egan, Onwentsia, 186; H. P. Toler, Baltusrol, 186; R. Sykes, Denver, 186; Herbert McBride, Cleveland, 186; Slason Thomson, Onwentsia, 186; N. Longworth, Cincinnati, 187; Arden M. Robbins, St. Andrews, 187; W. C. Carnegie, Pittsburg, 187; H. C. Smith, Onwentsia, 187; H. Mortimer-Billings, Ardsley, 187; Howard A. Colby, Essex County, 187; William Waller, Onwentsia, 187.

"COLUMBIA" and *Defender* have raced twice in the past week under conditions favoring neither unduly, and the new *America's* Cup defender has won on each occasion, by 3 min. 33 sec. off the Scotland Lightship, and by 3 min. 13 sec. off Larchmont in a special race for a cup offered by Clarence A. Postley, Commodore of the Larchmont Yacht Club.

These are the first of a series of races in which the two yachts will be engaged this month and August.

But the demand on our space compels us to postpone comment until next week.

HARVARD won the Yale baseball series by superior batting and steadier in-field work in a (third) final game that was as loosely played as any we have seen this season. The score 13–10 suggests free batting and error-making, and much of both abounded. From a spectacular view-point, however, the game was a rare treat and exciting, as the score by innings indicates.

Harvard	2	1	0	1	3	1	0	2	3—13
Yale	0	6	0	1	1	0	2	0	0—10

Harvard played with great confidence—too much so, in fact, in the second inning—batted hard and timely, and supported her pitchers the better. Fitz was knocked out of the box in the second inning, and Morse, who succeeded him, gave an exhibition so poor (eight bases on balls, and three struck out) that only the continuous and oftentimes brilliant support of the in-field saved the game. Had Robertson (one base on balls, and two struck out) been equally supported by the Yale in-field, it is highly probable Yale would have won. There is no doubt that very costly in-field errors lost Yale the game. Each side got eight hits; Harvard made three errors and Yale eight, of which Camp made three and de Saulles two, though the latter also made two very brilliant plays that largely redeemed his errors, and Quinby let in the run that tied the score in the eighth inning by throwing an easy ball several feet over first-base man's head. In the ninth the three Harvard men that scored each got first base on Yale's error.

There were some inexcusable muffs at various times, and confusion in base-running. In fact, the game was very poor baseball, and made most unpleasant by Haughton's muckerish actions on two occasions. Had he not been the captain he would have been ordered off the field; as it was, the Harvard coach, Frothingham, forbade him further coaching, and spectators showed their disapprobation of his unsportsmanly conduct by hissing.

THE second, at New Haven, also won by Harvard (4–3), was a much better exhibition, and Harvard fairly outplayed Yale in batting, fielding, and general steady work. Again Yale's in-field errors proved disastrous; and although she had men on the bases in every inning except the second, she could not hit the ball at the fitting moment. Harvard has developed bunting to a scientific degree; it put men on the bases in the first inning at New Haven, and in the ninth in New York, when they were very much needed. Robertson struck out four and hit two; Fitz struck out five, gave six first on balls, and hit two.

Harvard	3	0	1	0	0	0	0	0	0—4
Yale	0	0	0	0	0	2	0	0	1—3

The first game of the series at Cambridge—won by Yale (2–0)—was a thoroughly satisfying exhibition of the potential strength of the two nines, and the cleanest and fastest game played this season on a college diamond. Yale made no errors, and Harvard only two. It was largely a pitchers' battle, with both Fitz and Robertson in form—the former striking out ten and giving three first bases, while Robertson struck out three and hit one; and the support of each was first class; that of Yale's faultless. Harvard hit the ball quite as often as Yale, but was less lucky in having it fall invariably into a fielder's hands; nor did the nine play with the confidence and spirit that characterized its work later. Galbraith (H.) played a brilliant game at short, as did de Saulles (Y.) at second, and Wallace (Y.), right field; while the fielding of Fincke (H.), Fitz (H.), Quinby (Y.), and Camp (Y.) was worthy of comment.

Not until the fourth inning did Harvard get a man on first base, and Yale scored both her runs in the eighth on a hit by Quinby.

The features of the series undoubtedly were Harvard's increasing batting strength, which was so responsible for her success, and Reid's work behind the bat. 'Twas fortunate for Harvard that with a captain so calculated to unsettle his team by hysterical, not to say occasional muckerish, exhibitions, the nine yet had the steadying influence of Reid. Further discussion is reserved until a later review of the season.

FRESHMAN boat-races do not invariably furnish conclusive evidence on the comparative merits of strokes employed, but the two-mile struggle on the Hudson, in which Cornell, Columbia, and Pennsylvania were engaged this year, appeared to supply unusual opportunities for deliberate and dependable comparison. In no boat were the faults so glaring as to defeat the limit of usefulness of the particular style of rowing used.

Columbia got off the best of the three, though closely followed by Pennsylvania and Cornell, and within 100 yards Cornell had the lead and was giving a fine exhibition of the Courtney stroke. Steadily the lead was increased, the stroke being kept at 34, while Columbia and Pennsylvania, the former pulling 33 to 35, and the latter 36, had a desperate and magnificent struggle for second place, which the superior form of Columbia finally secured for her, although Pennsylvania hung on pluckily.

The excellence of Columbia's stroke oar had made his crew rather a favorite with many for this race, but the superiority of the Cornell stroke, when properly executed, never was more convincingly illustrated.

Columbia's form and watermanship were good, the boat ran well between strokes, and there was no lacking of spirit; but her stroke had not the length and even distribution of power that gave Cornell speed. Pennsylvania hung on determinedly for a mile and a half, but thereafter she fell back,—although the stroke was raised,—unable by exhausting physical effort to overcome the smoother work of her rivals.

CORNELL won by one and a half lengths in 9 min. 55 sec.; Columbia second, 10 min.; and Pennsylvania third, 10 min. 10 sec. Cornell showed a high-class Freshman crew, with an exceptionally strong stroke oar in Francis, who, by-the-way, seems a chip of the old block, and therefore comes honestly by his superior oarsmanship. It appeared to me that the Freshmen understood the Cornell stroke far better than did the 'varsity—or else some experimenting was done in the 'varsity boat this year.

I thought I detected evidences of a changing stroke in the Cornell four, which was defeated handily over two miles by Pennsylvania's strong, evenly moving quartet in 11 min. 12 sec.

The winning Freshmen averaged 150¼ pounds and 19¼ years. Personnel: stroke, J. M. Francis; No. 7, E. D. Toohill; No. 6, E. H. Powley; No. 5, A. S. Petty; No. 4, F. H. Teagle; No. 3, L. S. Haskin; No. 2, H. L. Chase; bow, A. F. Brinckerhoff. The time was not fast for the perfect conditions. The record for the Poughkeepsie course is 9 min. 19¼ sec., made in '97 by the Yale Freshmen that defeated Harvard (9.26) and Cornell (9.29).

ON the Thames, at New London, the Harvard-Yale Freshman race provided another interesting struggle between eights whose first and only rowing lessons had been on the principles finally employed in their race.

There were no lessons of other masters or other strokes to unlearn; Yale was coached in the stroke Cook evolved after his Henley experience in '96, by Payne Whitney and James Rodgers, two of the most skilful graduates of that school; Harvard was coached by J. J. Storrow in a stroke that, as near as could be, appeared to utilize the best qualities of the old Yale and '97 Cornell strokes and the stroke of Storrow's own winning crew in 1885. Yale used oars with 5½-inch blades. Harvard's oar blades were an inch wider. Yale's 'varsity used 6 and Harvard 7 inch blades.

Both crews had made fast time rows; Yale had greater strength, and as in the 'varsity, the emphasis of the catch and tremendous heave gave the crew the appearance of having more dash and activity; Harvard had more skill and finish.

With one false start, caused by a man in Harvard's boat slipping his seat, the two got off on even terms, both rowing 36. Yale obviously was putting more power in her strokes, and quite as obviously she was working harder over the same number of strokes to the minute; in 100 yards Yale's shell had a slight lead, which Harvard regained at the quarter-mile, to lose, however, at the half, where Yale had secured a half-length. From this point, however, Yale's apparent advantage ceased, and the finish seemed discernible to the close observer.

PUTTING on every pound of power, and evidently working to the limit of her strength, Yale could not widen that gap. At the mile, which Yale rowed in 4 min. 35 sec., Harvard was still a length in the rear. Both were rowing in first-class form at this point, Harvard the easier. An eighth farther Yale raised her stroke to 38, Harvard responding. At the mile and a quarter Harvard was cutting down Yale's lead and holding her form. At the mile and a half Yale led by a little over half a length, and was losing her form.

Swells from an encroaching excursion steamer here somewhat interfered with Yale, undoubtedly disturbing her at a crucial point in the race; and at the one and three-quarter miles Harvard was on even terms, going fast and in good form. Harvard continued to gain, and won handily by about two lengths, in 9 min. 33½ sec., Yale finishing in 9 min. 40 sec. Yale's time unquestionably would have been faster had the excursion boat not been allowed on the course, but she could not have won. Harvard had the race in hand from the mile; she had considerable left for a fast, desperate finish, while Yale had reached her limit half-way.

Both crews beat the old two-mile Thames record, which was about forty seconds slower than Harvard's winning time. Harvard averaged 161, Yale 166, pounds. Yale averaged about one year older. Personnel of the winning crew: Stroke, M. R. Brownell; No. 7, R. G. Goodell; No. 6, W. S. Shuebruk; No. 5, W. J. Ladd; No. 4, H. Bullard; No. 3, G. B. Emory; No. 2 and captain, G. Bancroft; bow, C. W. Morris.

Harvard won the four-oared two-mile race very easily.

Individual All-round Championship won by J. F. Powers, Seawanhaka one-rater trial races, and university rowing policies, discussed next week. CASPAR WHITNEY.

"THE GOLFER'S ALPHABET."—By Van Tassel Sutphen.—Illustrated by A. B. Frost.—4to, $1 50.—Harper & Brothers

Diary of the Revolt

Wednesday, June 28.—A despatch from Washington: It was definitely decided by the administration to begin enlistments for the volunteer service under the act of the last Congress. A despatch from Manila: Intrenchments at Muntinglupa, on the western shore of Laguna de Bay, were shelled by the gunboat *Napidan*, accompanying troops for Morong on Monday. One American was killed.

Thursday, June 29.—As a consequence of the announcement that a portion of the provisional army was to be raised, many applications were sent to the War Department for commissions in the new regiments. Secretary Alger stated that General Otis was to have an army of forty thousand men or more.

Friday, June 30.—Brigadier-General H. G. Otis, who had been called to advise President McKinley at Washington, said that Major-General Otis needed fifty thousand men for the work in hand.

Saturday, July 1.—General Ovenshine was in the hospital suffering from fever, and General Grant was commanding his troops on the line south of Manila.

A press despatch from Manila, *viâ* Hongkong, gave a much less favorable view of the situation than that which was embodied in the commanding general's message of June 26 to the War Department. Especially significant passages follow: "The outlook at present is more gloomy for a speedy ending of the war than ever before. The method of making raids into the country and then withdrawing, leaving the friendly natives at the mercy of the returning insurgents, has tended to alienate the population and not materially to weaken the insurgents, whose organization is still good. . . . More than twice the number of troops already here, including the volunteers, are necessary. . . . The troops in the north are in bad condition, many of the soldiers having irritated hearts, by reason of over-exertion."

In the neighborhood of San Fernando the Filipinos were constantly strengthening position, and from time to time attacked the men with "irritated hearts."

Sunday, July 2.—California volunteers on the island of Negros were leaving their posts and preparing for their return to America. Some of the hostiles, mistaking this movement for a retreat, attacked a company of our soldiers, killing one man and wounding another.

President Schurman of the Philippines Commission returned to Manila from a three weeks' tour among the southern islands. He received the impression that while "the intelligent and substantial citizens" desired an American protectorate, the masses were awaiting the settlement of the war in Luzon before declaring themselves, and that "they were chiefly anxious to be undisturbed!" This general impression is worth noting. President Schurman's easy conclusions, however, in regard to the state of affairs on the islands of Panay, Negros, Cebú, Bohol, Leyte, Samar, Zamboanga, Joló, and Palaúan were given a prominence in the daily papers which they scarcely deserved. In regard to Mindanao, for example, he was reported as saying, "There are 500,000 inhabitants, one-third of whom are Christian, one-third pagan, and one-third Moros." But, as a matter of fact, it was absolutely impossible for any one to know the number of Mindanao's inhabitants. The statement that "it is not necessary to apprehend any fighting in the Sulu Archipelago" just lacked the humorous turn in its phraseology to make it a good joke. Certainly it did not mislead any one who was familiar with the history of the Mohammedan Malays.

MARRION WILCOX.

Paris Exposition

A CERTAIN plan after being rejected as visionary and impracticable for a century is about to be realized, thanks to the work preparatory to the exposition of 1900. More than one hundred years ago Gabriel suggested that Paris would be improved and beautified if a wide street were opened in a quarter which he indicated. At that precise point the *Palais de l'Industrie* is now being demolished to make room for the new Avenue Nicholas II. Henceforth *l'Esplanade des Invalides* may be regarded as an annex of the *Champs-Elysées*, and it is already beyond a doubt that the exposition will leave behind it at least one magnificent souvenir.

Mr. Peixotto has chosen as the point of view for his drawing, which we reproduce in the present issue, the roof of the old *Palais de l'Industrie*, which would be picked from the general survey as easily the most interesting spot. When this building has been entirely cleared away, the *Champs-Elysées* will connect through a monumental gate with the splendid new avenue leading to the Seine, and flanked on the right by the *Grand Palais des Beaux-Arts*, and on the left by the *Petit Palais*, in which the evolution of French art will be illustrated by typical products of the earlier days. The river where the avenue joins it is spanned by the bridge named after Alexander III. of Russia. In fact, the national talent for elaborate compliment is fully displayed. It is as though the capital said, "Our dream of one hundred years ago is at last realized through Russia's friendship." Along the farther bank of the river stretches the *Esplanade des Invalides*, whose palaces, now merely huge iron skeletons, will be devoted to various industrial exhibits.

For the construction of the two palaces on the Avenue Nicholas II. huge blocks of stone are brought to the end of the avenue adjoining the river. Here great diamond-toothed saws carve out pieces of the required shape, which are then transferred to a position in front of the edifices by means of a massive electric rolling bridge, with a carrying capacity of ten tons, moving on two tracks thirty-six feet apart. This bridge is shown in the drawing just behind the construction-houses in the foreground.

Bishop Newman

JOHN PHILIP NEWMAN, whose death occurred at Saratoga on July 5, was widely known through his activity in church-work, and was esteemed one of the most eloquent men of his time. He was born in New York city on September 1, 1826, and at the age of twenty-two entered the Methodist Episcopal Church. The years 1860–1 were devoted to foreign travel and study. After his return the important task of reorganizing the Church in Louisiana, Texas, and Mississippi was assigned to him, and was fulfilled with conspicuous ability and success. In 1869 he was called to the pastorate of the Metropolitan Church in Washington; during three Congresses he was chaplain of the United States Senate; in 1873 President Grant appointed him Inspector of United States Consuls, and he was thus enabled to make a tour of the world; he became pastor of the Central Church, New York, in 1879, and of the Madison Avenue Congregational Church in 1882; in 1888 he was elected to the Episcopacy. Bishop Newman delivered orations and lectures, was the author of a number of books, and through a long career sustained the reputation which his talents and his energy had won.

Christian Endeavor

THE very setting of the eighteenth international convention was most fortunate. With only the St. Clair River separating Canada and the United States, Detroit was thronged with Canadian Endeavorers, and the union-jack and Old Glory were displayed hand in hand on every side. Patriotism was at white heat. The kindly greeting of President McKinley and his "earnest hope for the continuance and increase of the great results which the efforts of the Christian Endeavor Society have achieved" were received with unbounded enthusiasm. Never before in the United States was "God Save the Queen" sung with a royal British heartiness. The reception accorded to the representatives of Great Britain, Canada, and Australia as they presented their greetings was overwhelming. All this was most significant, and we venture to say that, notwithstanding there has always been the utmost cordiality among Endeavorers from all sections and in all lands, the Detroit convention has stirred the patriotic pulse as never before. From the extraordinary and most remarkable opening session of any Christian Endeavor convention, throughout the entire session every reference to the Christian Endeavor peace memorial, with its thousands upon thousands of signers, and the great world-wide international brotherhood of Christian Endeavor was a lively fact that all thinkers and rulers would do well to study and ponder. Christian Endeavor, with its banner flying in every nation in the world, is bound to have much to do in the coming years in making war between nations impossible and international arbitration a blessed realization.

Thoughtful students of the times for several years have been studying and attempting to conserve this new force as it is making itself felt in the politics of this and other nations. The Detroit convention, among other things, raised the standard of Christian citizenship, and its influence will be felt in coming years at the primaries and ballot-boxes. Christian Endeavor is not organizing a new party, but through the quick consciences of its individual members seeks to permeate all parties. The convention was another conspicuous demonstration for interdenominational fellowship. The spirit and atmosphere of the convention were not healthy for the sectarian. The promoters of sectionalism and sectarianism received many a hard blow. The Detroit convention was impatient of anything that emphasized division, but was satisfied with anything that makes for peace and harmony. Division and discord were not known; co-operation and conquest were, as ever with Christian Endeavor, the vitalizing watchwords. President Clark's strong and important annual address was received with profound emotion. "Going and Growing" was his subject, and it proved to be a ringing bugle-call to a mighty forward movement.

Denominational loyalty, from the earliest days, has been one of the foundation stones of Christian Endeavor; the Detroit convention gave new polish to it until it was radiant. The secretary's report silenced the critic of Christian Endeavor. The past year has been the best year of the eighteen years of the society's history. Over fifty-five thousand societies and three and one-quarter millions of members. Interesting as the Christian Endeavor statistics are, the section of the report that compelled attention was the brief review of what had actually been done by the societies during the year. Hundreds of thousands of dollars contributed to missions, hundreds of missionaries and workers entirely supported, through their own denominational boards, in the home and foreign mission-fields by Christian Endeavorers. Over one and one-half millions of church members during the last ten years from the ranks of the societies. These facts and figures fairly thrilled the hosts of Detroit convention-goers, and sent them home with the determination to make the coming year count for even more. The Detroit convention, the very best of the many memorable international gatherings of Christian Endeavor, has made advance steps, and new duties and responsibilities have been placed upon the shoulders of the young giant Christian Endeavor. The motto of the society, "For Christ and the Church," will be carried with more enthusiasm and heroism throughout the world.

JOHN WILLIS BAER,
General Secretary.

Kentucky Politics

AFTER a fierce struggle, lasting nearly a week, William Goebel was on June 27 nominated for the Governorship by the Democratic convention on the twenty-sixth ballot.

He entered the convention with very few delegates, and his chances were spoken of with contempt by the supporters of the two leading candidates, P. Wat Hardin and ex-Governor Stone, neither of whom had votes enough to control.

He formed a combination with the Stone men, and, according to the latter, Goebel was to name some of the minor candidates in return for his support of Stone for the Governorship.

By astute political management he manipulated the convention entirely in his own interest, and secured the passage of a resolution dropping the hindmost man after each ballot when twenty-five ballots had been taken, which resulted in forcing out Stone. The latter now charges treachery, and there are prospects of a lively struggle within the party.

ADVICE TO MOTHERS.—MRS. WINSLOW'S SOOTHING SYRUP should always be used for children teething. It soothes the child, softens the gums, allays all pain, cures wind colic, and is the best remedy for diarrhœa. —[*Adv.*]

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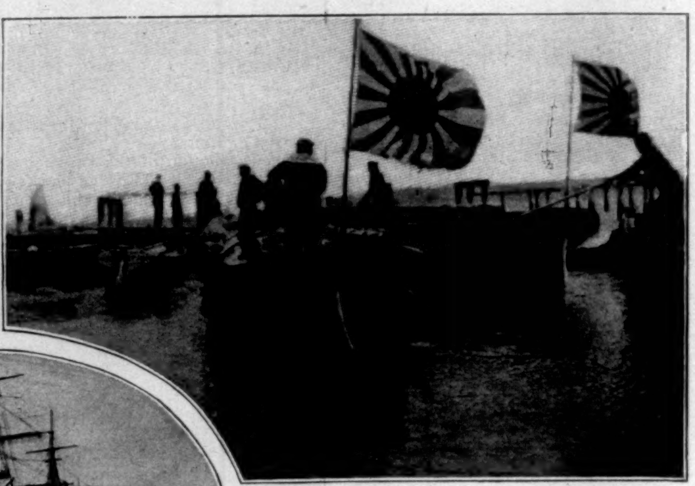
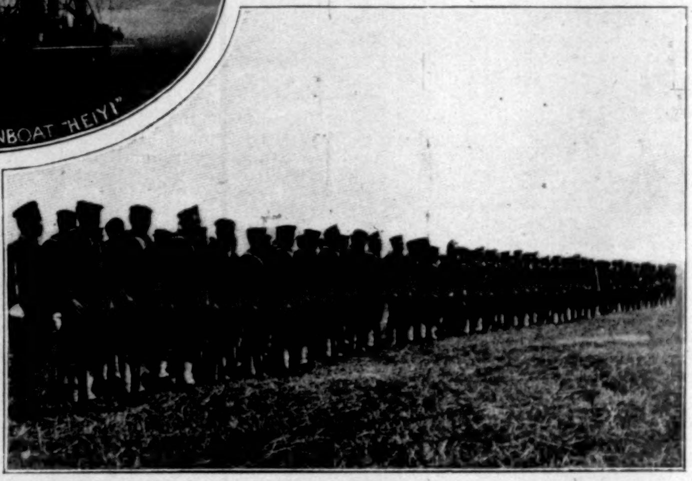
AT DRILL.



LANDING FROM THE "HEIYI."

BUGLE-CALL.



AT DRILL.

JAPANESE SAILORS ASHORE FROM THE GUNBOAT "HEIYI" AT SAN DIEGO, CALIFORNIA.

Honor to Regulars

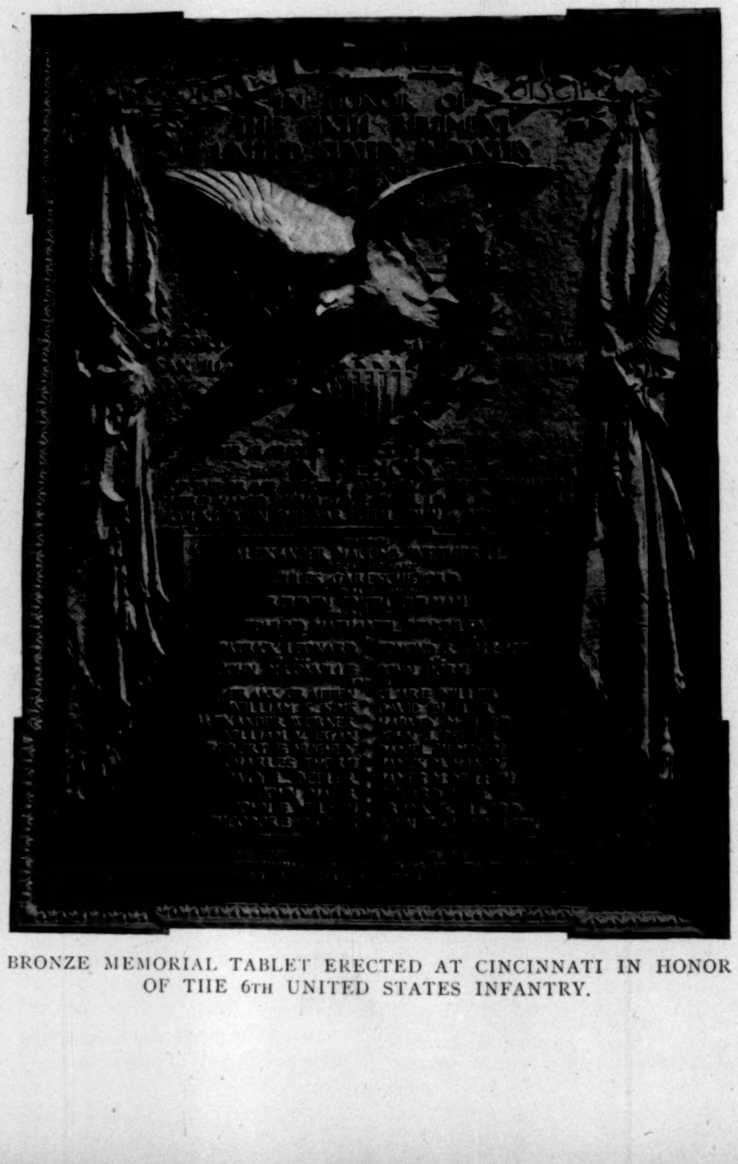
IN the battle of Santiago the regular army "found itself." Volunteers had outnumbered regulars in the most important engagements of American soldiers before that time, and it was entirely natural that the public should commend the volunteers, and at first almost ignore the regulars who won at San Juan and Caney. It was the American tradition and the national habit.

But it is not less the national habit to revise impressions, so that they may conform to the facts, at the earliest possible moment, and we know that loyal friends of the Sixth Infantry in the good town of Cincinnati began to make plans for a memorial to commemorate the services of the army—and especially of their favorite regiment—even before the troops came back from Cuba.

The Sixth had been stationed for several years at Fort Thomas, Kentucky, near Cincinnati, and it was largely recruited from adjacent counties of Kentucky, Ohio, and Indiana. On June 23, 1898, it landed in Cuba, and one week later bore itself superbly in the capture of the enemy's strong position, Fort San Juan. General Kent, in his official report, dated July 7, said that credit for this achievement was "almost equally due to the Sixth, Ninth, Thirteenth, Sixteenth, and Twenty-fourth regiments of infantry."

The losses of the Sixth were terribly severe, and when, after landing at Montauk Point, the regiment was sent back to Fort Thomas, sympathy for the hardships endured, as well as enthusiastic recognition of gallantry, made Cincinnati's welcome a memorable event. Beyond all question, this outpouring of enthusiasm was the more spontaneous because its object was an organization embodying or representing the manhood of a certain locality; nevertheless, the whole regular army shared in the tribute of praise and appreciation. And a fact to be emphasized is that the great bronze tablet which was unveiled at Fort Thomas on July 1, the anniversary of the battle of San Juan, has this larger significance. It is a tribute to the whole regular army as well as to the Sixth Regiment.

The tablet is about eleven feet high and eight feet wide; its weight is 3800 pounds. The claim may be made for it that it is not only the first memorial of its kind, but the largest bronze tablet yet set up in this country. We think, however, that especial interest should attach, and certainly will attach, to the motive and to the details of the execution, as shown in our illustration. The sculptor is Mr. Clement J. Barnhorn, and the designer Mr. H. L. Bridwell.



BRONZE MEMORIAL TABLET ERECTED AT CINCINNATI IN HONOR OF THE 6TH UNITED STATES INFANTRY.

A Friendly Invasion

THE Japanese gunboat *Heiyi* carries sailors and marines who are well up to the mark in point of discipline, and who can row cleverly. Proof of these facts was offered at San Diego, California, towards the end of June, when the United States government showed its friendship for Japan by making an exception to the rule that no foreign power may place armed forces on American soil.

The illustrations above show the men who were landed at San Diego for the purpose of drill. Evidence of the careful attention paid to shore drill by the Japanese navy was afforded to Americans on the Atlantic coast on the occasion of the launching of the Japanese cruiser *Kasagi*. While the *Heiyi* was at San Diego its boat crew won a very exciting six-oar barge-race from a crew representing our Naval Reserves.

Nebraska's Way

A COUNTY court-house arrived in Alliance, Nebraska, at noon on June 29, after a journey of twenty miles by rail. It had been located at Hemingford, and when that town ceased to be the county-seat the loss of the building might have been regarded as inevitable, as its estimated weight was seventy tons, its height forty feet, and its other dimensions thirty-six by forty-eight feet. Fortunately, however, the new county-seat was on the same branch of the Burlington and Missouri River Railroad, only twenty miles away. The "movement," as it was called locally, began when the floor and frame were made rigid by the building of four semi-elliptical trusses of the entire width of the building; then the court-house was loaded on four common car trucks, one under each of the trusses; next a large freight engine was attached, which at times drew its singular train along at the rate of ten miles an hour, though most of the trip was made at a speed of two or three miles an hour. The diagonal guy ropes shown in our illustration were fastened to two loaded coal-cars having a capacity of sixty thousand pounds each.

Railroad Achievements

BUILDING A GREAT STEEL ROOF

It is an undertaking of unusual magnitude to build a roof over a space as wide as a city block and leave it unobstructed in a clear span from end to end. It is a more remarkable one to do it when the ground below is covered by a dozen railroad tracks with scores of trains arriving and departing every hour of the day and night, and yet cause no interruption to the thousands of passengers or to the endless streams of express, baggage, and mail trucks that are constantly being delivered and handled there, while the platforms are covered with hurrying crowds.

It is still more remarkable when, under these conditions, a 4,500,000-pound steel building, one block wide and two blocks long, is cut into two pieces, the pieces widely separated, and a new portion built between the old ends, and actually built faster and cheaper than a new roof of the same dimensions could be erected in an unrestricted vacant lot. This is what has just been done at the Pennsylvania Railroad Depot in Jersey City, where in a few weeks several hundred tons of massive steel have been put in place, high in air, over the heads of thousands of passengers, without danger or accident. In doing it the old work has been made to support the new, and serve, without extra labor or expense, instead of a scaffold, which would have cost thousands of dollars. Now that it is accomplished, the simple method seems obvious, but as there is no record of its previous application, it may be considered a novelty in structural engineering.

The original depot, built in 1891, included a train-shed 652 feet long, 256 feet wide, and 110 feet high, which had a single clear span from side to side, with a lofty curved roof supported on eleven pairs of great steel arch trusses. At the east end the pairs of trusses had additional horizontal bracing to resist an estimated wind pressure of 400,000 pounds on the gable wall with its 6000 square feet of glazing. This made them quite different from the nine intermediate pairs of trusses, and when it was lately decided to spend about $700,000 in enlarging the train-shed and building new depot rooms for the great terminal of over 9000 miles of tracks, it was determined still to retain these special trusses for the end of the building and to secure its required increase of length by moving them 120 feet further east (toward the Hudson River), and building in the space between them and the old roof a new section of roof supported on two pairs of new trusses of 252 feet 8 inches clear span, duplicates of the old ones, and braced together like them 14½ feet apart.

A transverse row of vertical timbers was set on the floor between the tracks, just west of the end pair of trusses, and wedged up to support the roof, whose purlins were then disconnected from them. The roof was cut through from side to side, and the trusses, being thus left free and independent, were unbolted from their pedestals and the great beams which tied them across under the tracks, and were quickly lifted several inches by a few men pumping on hundred-ton hydraulic jacks. Two pairs of steel rails, with numerous solid loose steel rollers between them, were inserted under each end on timber crib-work built up several feet from the ground to the tops of the foundations. The trusses were lowered to bearing on the rollers. A heavy tackle made to multiply the pull ten times was anchored securely at each end of the truss, and its free end secured to it just above the rollers; the hoisting lines were wound up by two steam-engines, and the pair of trusses, weighing about a million pounds, were pulled three feet away from the rest of the building. The top was braced back to the old roof, guyed, and additionally secured by a wide pyramidical timber tower, wedged up to bearing under it. Strong horizontal timbers were bolted across the under sides of the trusses so as to project about four feet beyond them towards the old roof, and form supports on which the portions of a new arch truss were assembled. The roof had been left on the pair of trusses and formed an excellent working platform, on top of which were set three large derricks, that lifted and handled the eleven sections of each truss. These sections were great masses of riveted steel delivered from the bridge shops as required, on cars run in on the side and centre tracks of the depot.

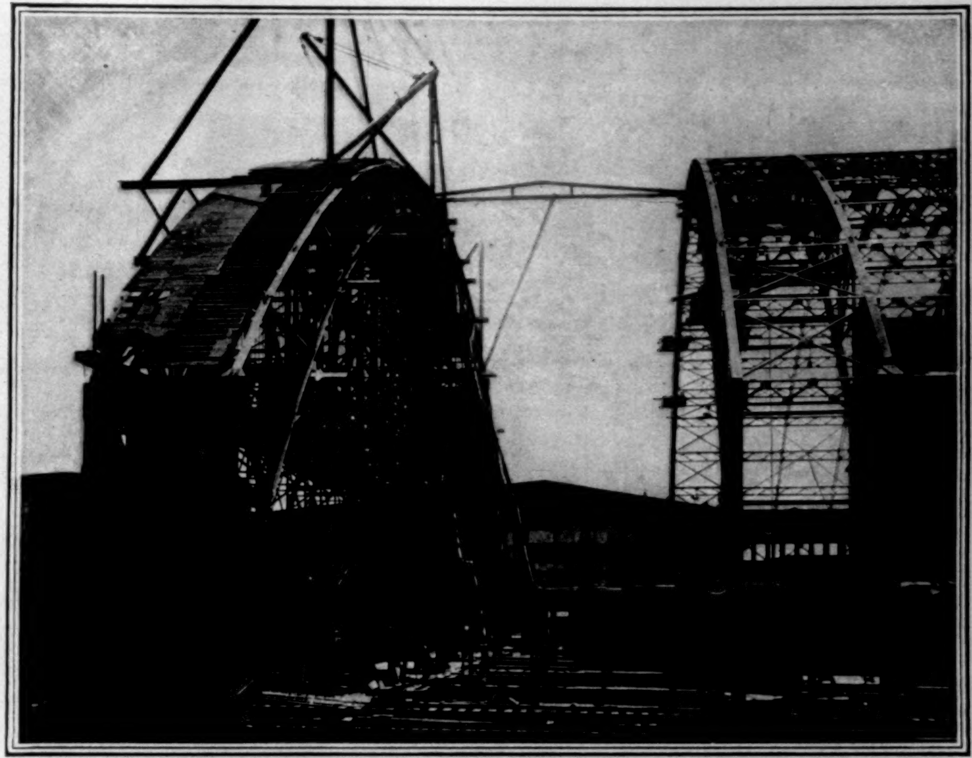
When the new truss was completely assembled and self-sustaining, it was braced securely by connection with the old roof, and its wedge supports slackened till it was lowered to rest on the old pedestals and was free of the projecting beams on which it had been assembled. Then the old end trusses were pulled forward fourteen and one-half feet, and the second truss of the new span was similarly built.

Again they were pulled forward about forty-six feet at a speed of five or ten feet a minute, carrying the timber tower suspended from the middle. They were braced and guyed in position, the tower wedged up to bearing, and the second pair of trusses erected as the first had been. The roof was built on the trusses, and so on until at last the old trusses were moved a fifth time, to their final position, and the great frame-work rapidly completed, the trusses having been assembled in about four days each.

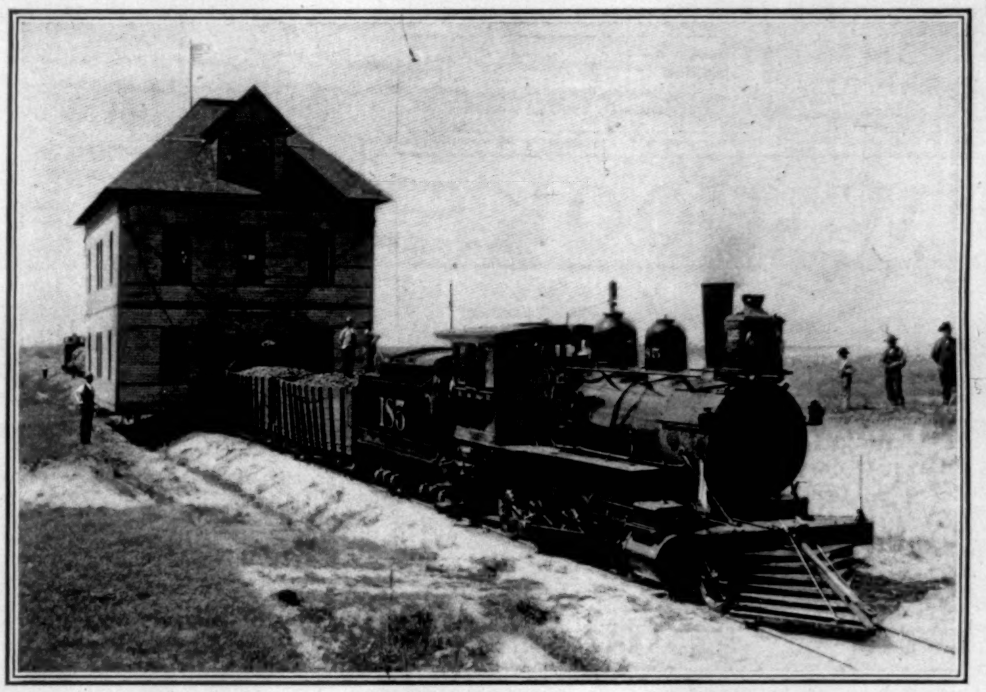
When the original train-shed was built its trusses were assembled on an enormous rolling scaffold 234 feet long by 60 feet wide, whose curved platform was 84 feet high in the middle, and was convex to fit under the side of the arch truss. It had two transverse rows of six vertical timbers, each supported on a railroad-car truck, so that the whole structure could roll from truss to truss on six of the regular depot tracks. This scaffold cost about $8000, an expense entirely saved by the present method of doing the work.

When this train-shed was built it covered a larger area and had a longer span than any other single roof in the world, but since then the similar train-sheds of the Broad Street Depot and Reading Terminal, in Philadelphia, have been built with slightly greater dimensions, and the Exposition Buildings for Machinery Hall, Paris, and the Liberal Arts Building, Chicago, were much longer, being respectively 362 by 1380 and 368 by 1268 feet.

FRANK W. SKINNER, C. E.



A GREAT ENGINEERING FEAT—MOVING A GIGANTIC STEEL ARCH IN THE PENNSYLVANIA RAILROAD DEPOT, JERSEY CITY.



THE BOX BUTTE (NEBRASKA) COUNTY COURT-HOUSE TAKES A RAILROAD JOURNEY.

[See opposite Page.]

SIXTY-TWO MILES AN HOUR.

Instantaneous Photograph of the "Saratoga Limited," just below Breakneck Tunnel, in the Highlands of the Hudson River.

Middle West Series

I.—THE TRIUMPH OF THE COW

THE cow is not usually accounted a heroic animal. On the contrary, she is usually credited, I believe, with a variety of very unheroic traits and capacities, of which perhaps the most venal is a dense stupidity. Nevertheless, there was a time in the not remote history of a large section of our country when this underestimated animal came bravely to the front and rescued entire communities from financial disaster, rendering a service so signal that it deserves to be commemorated. The territory in question is one of the most fertile portions of the Mississippi Valley, of which the northeastern part of Iowa may be taken as typical.

To understand fully the circumstances that gave the cow her opportunity, one must go back a little into past history. Past history, however, is not so very ancient in the country of which I am writing, for it is at most not over half a century since the first furrows were broken here. The particular events that brought the cow prominently upon the scene transpired only about a score of years ago. It was the period when the entire farming community had gone mad over the raising of wheat. The invention of the self-binder had seemed to open to the farmer boundless opportunities for gaining wealth. In the belief that he was wisely grasping these opportunities, he had gone in debt for large tracts of land and for expensive machinery, expecting to pay for it all with the proceeds of the wheat crops of two or three seasons.

And just at this critical juncture the wheat crop failed for three successive seasons. Partly it was the drought, the rust, the chinch-bug, the grasshopper; partly it was that the soil was exhausted for that particular grain. But whatever the causes, the result was patent enough. Where wealth had seemed secure, poverty had come instead. The mortgaged farms were sacrificed; thousands of the most prosperous farmers were financially ruined. The money-lenders alone reaped a harvest. Utterly disheartened by this bitter experience, large numbers of farmers turned over their lands to the mortgagees and sought new homes in Dakota. The braver ones remained to start anew in their old home, perhaps renting land where before they had been owners. But how to start? Wheat, the great staple, had failed them, and was no longer to be trusted. What should take its place?

At this critical juncture the cow was discovered. By this I do not at all wish to imply that the cow was, up to this time, an utterly unknown quantity in the Middle West. Such was by no means the fact. The schoolboy of this region was in no manner of danger of committing the mistake of the Boston school-children who supposed the cow to be depicted life size in their picture-books. On the contrary, the youth of this region usually had early implanted in his mind some very practical knowledge as to the appearance and disposition of cows, that remained throughout life one of the most vivid recollections.

"Pailing the cow," as the youth graphically described it, and driving her to pasture, were considered everywhere to be very good occupations for boys out of school hours—by everybody but the boys themselves. And it is but fair to admit, before going on to more eulogistic mention, that the average cow is possessed of personal traits admirably adapted to embitter the life of any youth who comes thus familiarly in contact with her. It is not the personal mental qualities of the cow that entitle her to be eulogized.

I say, then, that the cow was familiarly known in the Middle West as a personality of individual usefulness long before she was discovered as an economic factor of large importance.

But for the most part, up to this time, even large farmers kept but a few head of cows, and these were indifferently cared for, mostly being tended by the children or the "wimmin folks," the latter of whom made enough butter to supply the family, and perhaps a few odd pounds to be traded for groceries in the village.

The milking was usually done out-of-doors, no great attention being paid to cleanliness. The milk was "set" in old-fashioned milk-pans, which were usually during summer months kept in places so warm that little cream rose, and that of very inferior quality. The butter, made under equally unfavorable conditions, was little better than grease, and when taken to town brought only a few cents a pound.

Very little attention was paid to the breed of the cattle. Hence the calves had but inferior possibilities at best, and these were greatly curtailed by the treatment they received. They were usually fed skim-milk for a little time, and then turned out to grass. Later, as steers of stunted growth, they were herded on the open prairies, cultivated farm-lands being considered far too valuable to give over to pasture. Sometimes the steers were herded fifty or a hundred miles from the place where they were owned, enormous herds being tended by a single man on a pony. In the fall they were driven back to their owners, a few here and a few there, by whom they were fed through the winter, mostly on hay. The result was, of course, that when finally marketed these cattle could only compete on an equality with the ranger steers of Texas. They cut an insignificant figure in the agricultural scheme of the farmer who was raising forty bushels of wheat to the acre and selling it for at least a dollar a bushel.

Such was the status of the cow and her progeny in the days when the Middle West was the land of wheat. But the time came, as has been said, when the wheat failed the farmer, and disaster threatened if it did not overtake him. Then it was that the more discerning discovered that they possessed in the cow a treasure whose worth they had little appreciated. The experiments of these pioneers in the dairy field were so signally successful that their neighbors fell rapidly in line, and in a half-decade the country was transformed from a stronghold of wheat-cultivation to a land of meadows and pastures and corn-fields.

This transformation was greatly hastened and facilitated by the springing up of creameries and cheese factories everywhere. The managers of these were able to give the farmers sums for their milk and cream that were fabulous as compared with what the same products were worth to him when he tried to market them himself. A system of practical education in dairy methods was undertaken. The farmer soon learned that it paid him, in the first place, to keep none but good cows, and the breeds were rapidly improved. Then he learned that cream will rise to advantage only on cold milk, and he found that by substituting cans for pans and setting them in deep tanks fed by windmill pumps he gained new ideas as to the amount of cream really contained in the milk. And for this cream the managers of creameries gave him prices that seemed simply fabulous.

The development of the dairy led naturally enough to the development of beef cattle. Some farmers confined themselves to one or the other of these branches of cattle-raising industry, but the majority combined the two. And it is no exaggeration to say that the two industries together rescued entire farming communities from financial wreck. Very soon an air of prosperity came over the country. Great barns and granaries were erected everywhere, and later on substantial farm-houses completed the groups.

This metamorphosis occurred about ten or fifteen years ago. Since then the farming history of this region has been merely a record of development along the same lines. The most conspicuous change of details has been, perhaps, the improvement of creamery methods, due to the introduction of the cream-separator. This is a device by which, through the action of centripetal and centrifugal forces, the cream is separated from the milk almost instantaneously, instead of waiting for the slow process of "raising." Some dairies now have their own separators, and extract the cream from the milk immediately it comes from the cow. But such use of the separator is not yet general. Most farmers take the milk in large cans to the factory, where it is separated at once, the skim-milk being carried back in the same cans to feed to calves and pigs.

Some farmers still utilize their own cream, having learned how to make superior butter, and preferring to make and market this themselves. Such, of course, have miniature creameries of their own, with all modern appliances. The old dasher churn is a thing of the past, even with those farmers who make but a small supply of butter. But the main bulk of the cream goes to the creamery, and is there handled on a large scale. The milk that comes in the morning has its cream extracted immediately, and the cream, standing in large tanks, is subjected to a forcing process that makes it suitable for butter-making within a few hours, instead of standing for days, as by the old methods. Great rotating churns run by steam change the cream to butter, and as the final process the butter is "worked" on a revolving table in a way that enables one man to accomplish more than half a dozen could by ordinary methods.

Finally the butter, all worked and colored to a uniform grade, is packed in firkins, ready for shipment, and the firkins are perhaps in the market-places of a distant city at a time when by the old methods the cream would hardly have finished rising on the milk. Thus have the rapid, hurrying methods of modern life invaded even the remote places of the country.

Ten years ago, in the Middle West of which I write, an average horse would bring the price of at least half a dozen average cows. To-day, side by side, an average cow is worth more than an average horse. Indeed, a span of good horses is often sold for the price of an average cow.

So, ten years ago, if the average farmer took to market a bushel of oats, he received for it as much money as he commonly got for five or six pounds of butter. To-day a single pound of his butter—he having meantime learned the secret of making it good—is worth two bushels of oats. Similarly the wheat market has declined, so that the farmer no longer cares to raise that cereal, though he might do so did he choose in many regions where fifteen years ago the crop failed. Then it seemed an awful calamity that wheat failed to grow abundantly. Now no one greatly cares whether it will grow or not, for the greater value of the cow's con-

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IT is safe to say that one of the most popular poems ever written was the satire, **Nothing to Wear**, that appeared in HARPER'S WEEKLY in 1857, and in a short time became famous throughout the world. Readers of the older generation need no reminder of "Miss Flora McFlimsey of Madison Square," and the inimitable wit and satire with which William Allen Butler, a humorist of the old school, described the inadequacies of her wardrobe. The new edition of "Nothing to Wear" comprises also the famous "Oberammergau" and fifty other poems. It is an entirely new publication from new plates, and has been re-edited by the author.

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tributions to the economy of farming has been demonstrated.

Fifteen years ago the prairies were great waving seas of wheat-fields, interspersed at most with insignificant and apologetic pastures, in which grazed a few neglected cattle. To-day the same prairies are checkered with great rolling fields of timothy and gigantic stretches of rustling corn-fields, and, in the abundant pastures of literal thousands of rolling hills, sleek cattle, to which all these other things are tributary, by their suggestive even if unwitting presence, announce their victory and their supremacy.

Whatever the future may hold for the Middle West, the present era in that "garden spot of agriculture" is the era of the cow.

H. S. Williams.

Arts and Crafts

V.—WHAT THE PUBLIC CAN DO—A SUGGESTION FOR WOMEN'S CLUBS

A MANUFACTURER of Kidderminster carpets recently sought the advice of a well-known designer identified with the Arts and Crafts movement. The sale of his carpets had fallen off so badly. He could find nothing wrong with his methods of doing business or with the quality of the carpets. He suspected that the designs must be unattractive. The designer assured him that his surmise was right; that his designs were of a kind that the improved taste of the public would not accept.

Now, granting that this diagnosis was correct—and there is no reason for not doing so—the circumstance illustrates the power of the public and the influence which they can exert upon the artistic development of the handicrafts. Previous papers in this series have touched upon what art schools, art-workers, and the manufacturers can do. In this one the opportunity and the obligations of the purchasing public will be discussed. Their power is enormous and conclusive. If an article will not sell, its reproduction is at once dropped, and *vice versa*. The manufacturer must continually keep his finger on the public pulse. However eager he may be to improve the artistic quality of his products, he dare not go far ahead of the public's capacity of appreciation, or the goods will be left upon his hands. The most enterprising can only afford to do what the boy did to encourage his mount in the donkey-race—he tied a bunch of carrots to the end of a stick, and kept it just beyond the donkey's nose; and the latter, straining every nerve to catch up with the carrots, won the race. But our point of view in the present paper is from the opposite side—what the public can do to stimulate the manufacturers. To this end the public must be considered under two heads—(1) the large bulk who form the average of the community, and whose purchasing power is limited by considerations of cost, and (2) the smaller body whose wealth gives them greater opportunities of gratifying their tastes. This distinction is the arbitrary one of ways and means, but need involve none in the more important matter of taste. By both classes must be gained a more discriminating sense of what is beautiful, and why it is beautiful, before their influence can exert itself.

The cultivation of taste is spreading everywhere, but, so far, without a general reference to the applied arts. Visitors to museums, for example, study quite carefully the pictures and sculpture, and gain an insight into the personality of the artists, but pass by the cases of gold and silver ware, of pottery, tapestries, and so on, with only a cursory glance. These things do not speak to them so directly as the pictures and sculpture; or, rather, they are deaf to the speech. The reason seems to be that we have not got out of the way of taking interest mainly in the subject of a work of art, and less, or none at all, in the way the subject is expressed. "What is it about?" is the question one so frequently hears in a gallery; and then recourse is had to the catalogue, the description is read, another look is given at the picture so as to verify the points mentioned, and the visitor passes on, missing what the artist had really striven to express. For he does not work with words, like a romance writer, a poet, or dramatist, but with lines and forms and color. If his picture or sculpture is good, it can be only inadequately translated into words. He has not thought it out in words. You will never learn to understand French until you can think in French; and you cannot properly appreciate an artist's expression until you try to think in his language. Then you begin to perceive the subtlety, depth, force, persuasiveness, or what not of his speech, and not only its bold statement of fact. The picture is no longer merely two peasants standing in a potato-field saying an Ave Maria because the angelus is sounding, but is revealed as a poet-painter's vision of the poetry and prose of labor. Yet a ripe appreciation of such a picture as that is only one step forward. The subject strikes a chord of human sympathy, which probably in a large measure stimulates the appreciation. We need next to study a picture which does not make a direct and forcible appeal to our hearts or minds, and try to appreciate it for its style, just as we often read a little essay about nothing at all in particular merely for its beautiful turns of expression, and the insight it gives us into the charming thoughts and idiosyncrasies of the writer. In this way the mere inflections of a line become delightful, the modelling and distribution of masses a source of joy, the treatment of color a thing to revel in, and the atmospheric effects enchanting. Then we get at the real spirit of the artist, and share in the joy with which he worked. This is a brief statement of how the artistic appreciation should be cultivated, and it brings us to this point, that there is enjoyment to be derived not only from what the artist says, but from his manner of saying it.

By this time we are in the mood to appreciate the work of the artist applied to handicrafts. We examine a vase and note its outline, and estimate the amount of feeling of beauty that was expressed in it. We observe the proportion of its parts to see how far there are a unity of motive and a sense of reposeful orderliness; study its color in search of brilliance, purity, mysteriousness, or what not; examine the applied ornament with reference to its intrinsic beauty and its relation to the open spaces, and look for the last impress of the artist's touch in the graciousness of its surface texture. After which (or before which, it matters not) we question its adaptability to the purpose for which it was made. If we would proceed in this way our museums would no longer be the receptacles of so much *buried* treasure. The exhibits would speak to us, as our books do, which we read and not merely glance at, and they would tell us the story of human effort and thought and longing. There is nothing transcendental or impossible in this. It is surprising how soon one can educate one's self to a reasonable appreciation of these matters by giving a little thought to them. Very speedily it becomes a habit, and then grows the realization of the ugliness and brutality, the vapidness, triviality, or tastelessness of so much of our surroundings. For example, train-loads of furniture are turned out every year to meet the average taste (so-called, for it is really lack of taste). The material is excellent, for America is rich in beautiful woods. Probably it is not well seasoned, and certainly its surface has been spoilt by excessive varnishing, so that it may shine and attract the average eye. It is constructed on principles of practical utility, but seldom has any elegance, even if it is not downright ugly. It is overloaded with ornament, or, if of the cheaper kind, spattered with bits of decoration, stamped out and stuck on with no sense of fitness. As long as people buy this stuff it will probably be made; and if there is no other, they must buy it. But supposing fifty people in each of our large cities who may be buying furniture to-morrow should say, "Oh, we want something simpler; we do not care for this ornament, but we should like a little more elegance of form"; and supposing others on subsequent days also expressed dissatisfaction—is it not probable that in time the complaint would be brought to the notice of the manufacturers, and that they would try to remedy it?

One has great faith that it is through the women of America the improvement will be brought about. Their extraordinary eagerness to cultivate their faculties to the highest point is one of the signs of the time which points to an immense intellectual and æsthetic harvest. If the women's clubs throughout the length and breadth of the land would take this subject up in the thorough and systematic manner they give to other subjects, they would discover not only the desirability of a change, but a way to promote it. When museums are at hand one case of exhibits at a time might be taken for discussion and the comparison of views, failing which the objects in the home could be made the subject of study.

That smaller class of the community to whom the question of expense is comparatively insignificant could add to the beauty of their surroundings and advance the improvement of the applied arts by putting themselves in direct communication with the designer. If they possess cultivated taste, why should they employ the services of "a middle-man"? The real collector of pictures loves to "discover" a painter; to give him the encouragement of personal commendation and to help him to reach his ideals. Would there not be just as much pleasure in discovering a craftsman, and giving him the opportunity of obtaining that honorable recognition which the present conditions of trade deny him? There are a great many in this country, working silently and unknown, except by the men who get rich out of their labor. At present their opportunity of expressing in their work the feeling that they are conscious of is hampered by the conditions under which they have to work, and they would ask no greater boon than to be able to work directly for some one who could appreciate their ideals.

One word more: as we, the public, grow in taste, we shall probably find ourselves approximating to increased simplicity in our home surroundings. We shall learn a lesson of the Japanese, who keep their treasures in a cupboard, and bring out one or two at a time to adorn their rooms. We shall content ourselves with a few beautiful things, not necessarily costly, and cease to make our rooms look like a bric-à-brac shop, bewildering to the eye, and exhausting to the person who has to dust them. In our dwelling-rooms we shall put what we really love to dwell with.

Charles H. Caffin.

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